OES CALIFORNIA
Governor's Office of Emergency Services

Emergency Planning Guidance

Public and Private Water Utilities

March 1999

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March 26, 1999

To: California Public and Private Water Utilities

SUBJECT: EMERGENCY PLANNING GUIDANCE FOR PUBLIC AND PRIVATE WATER UTILITIES

During an emergency, public and private agencies are often tasked with working together in the performance of critical functions at the scene or in a local emergency operations center. The *Emergency Planning Guidance for Public and Private Water Utilities* is intended to improve coordination among water utilities and other emergency response agencies and to assist water utilities in developing or revising emergency plans and procedures. This guidance will also assist public water utilities of all sizes with implementing the Standardized Emergency Management System.

This document has been prepared by the California Governor's Office of Emergency Services (OES) in cooperation with the California Utilities Emergency Association (CUEA, Inc.) and the American Water Works Association (AWWA). I encourage all local, state, federal, and private water utilities to use this document and to attend available training courses sponsored by CUEA, Inc. and AWWA to enhance their capabilities to deal with emergencies.

Sincerely,

Original signed by Dallas Jones

DALLAS JONES
Director

PREFACE

The *Emergency Planning Guidance for Public and Private Water Utilities* is intended to assist water utilities of all sizes comply with the requirements of the State Department of Health Services and the Standardized Emergency Management System, and improve coordination among water utilities and other emergency response agencies. This guidance may also benefit private utilities. During an emergency, public and private agencies are often tasked with working together in the performance of critical functions at the scene or in a local emergency operations center. Communications in these situations is paramount. Private utilities' voluntary use of this guidance may help ensure effective communications between all agencies. Compliance with the guidance may also assist investor owned utilities in cost recovery of damages and as an aid in reducing potential liability. It also satisfies Government Code Section 8607.2(c) which states:

"By December 1, 1996, the Office of Emergency Services shall establish appropriate and insofar as practical, emergency response and recovery plans including mutual aid plans, in coordination with public water systems, ...".

This document has been prepared by the California Governor's Office of Emergency Services (OES) in cooperation with the California Utilities Emergency Association (CUEA, Inc.) and the American Water Works Association (AWWA). A committee was formed with the expressed purpose of reviewing and revising the existing *Emergency Handbook for Water Supply Managers*, originally developed by the Department of Water Resources.

A significant portion of this document reflects work completed by the East Bay Municipal Utility District and Southern California Water Company.

The following deserve thanks for their contributions to this document:

East Bay Municipal Utility District	Ray Riordan
CUEA, Inc.	Katherine Boxer-Latipow
Helix Water District	Don Kaiser
Dames & Moore	Geoffrey A. Bates
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Southern California Water Company	Skip Faria
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	Steve DeMello
	Memoree McIntire
	Carolyn Moussa
	Tim Miles
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GUIDANCE OVERVIEW

PURPOSE

Emergency Planning Guidance for Public and Private Water Utilities is designed to assist water utilities in developing or revising emergency plans that conform with state and federal emergency planning programs and guidance. It addresses planned response to emergency situations associated with natural disasters, technological incidents, and national security emergencies in, or affecting, a water utility facility and its service area. Topics discussed include:

- pre-emergency planning and emergency operations;
- the emergency management organization required to mitigate any significant emergency or disaster affecting the water utility;
- policies, responsibilities, and procedures required to protect the health and safety of water utility personnel and facility property;
- operational concepts and procedures associated with field response to emergencies, Emergency Operations Center (EOC) activities, and the recovery process;
- establishment of the framework for implementation of the Standardized Emergency Management System (SEMS); and
- multi-agency and multi-jurisdictional coordination, particularly between the water utility and local, state, and federal agencies, during emergency operations.

The utility's emergency plan must be tailored to fit the needs of each utility and is not complete until coordinated with the utility's municipal, county, and state emergency services organizations. The plan by itself does not fulfill the need for developing specific standard operating procedures, conducting employee training, or organizing and revising the plan. It also does not satisfy the need for meeting with local agencies and discussing water system dynamics, vulnerabilities and response plans as required by Government Code section 8607.2(a).

HOW TO USE THIS DOCUMENT

This Guidance is divided into 14 major sections and includes appendices. Most sections have three parts:

- A "purpose" portion which discusses the need for the content and provides guidance for developing the particular parts of an emergency plan;
- An "example" portion which provides samples of what other agencies have done or illustrates how to use the information; and
- A "worksheet(s)" which can be used to draft or outline a portion of an emergency plan.

Generally, the worksheets are "fill in the blank" pages which can be pulled out of the document, completed, and used to assist in assembling a draft plan. However, as discussed later, there is much more to creating a useful emergency plan than reading this guidance and filling out the worksheets. Merely completing the worksheets will not result in an adequate emergency plan.

For field personnel, much of the information provided can be used to develop a field response manual similar to the Department of Water Resources' *Emergency Handbook for Water Supply Managers*.

RELATED GOVERNMENT CODE SECTIONS

Guidance and information on other portions of Government Code Section 8607 is available:

Section 8607, Standardized Emergency Management System (SEMS)

SEMS Guidance, Office of Emergency Services, 1995
SEMS Approved Course of Instruction, Office of Emergency Services, 1996

Section 8607.1, Statewide Fire Hydrant Color Coding & Coupling Standards

Regulations, Department of Forestry and Fire Protection, Office of the State Fire Marshal, 1997

Section 8607.2, Public Water System Plans

Requires public water systems with 10,000 or more service connections to review and revise their disaster preparedness plans in conjunction with related agencies, including fire departments.

Requires public water systems with 10,000 or more service connections following a declared state of emergency to furnish the Legislature with an assessment of their emergency response and recommendations within six months after each emergency and to implement their recommendations in a timely manner.

AVAILABILITY OF

This guidance will be available in the following ways:

GUIDANCE

- Internet/OES Home Page
- Computer disk (Macintosh and DOS)
- OES Regions, CUEA, and AWWA

UPDATING THE GUIDANCE

This document will be updated periodically as major changes occur in laws, regulations, emergency management principles, and emergency response and recovery. OES will consult with professionals in the water utilities field when making changes to the document.

FOR MORE INFORMATION

Contact the Office of Emergency Services:
Planning and Technological Assistance Branch: 916-464-3200

DISCLAIMER: This Guidance contains nationally recognized, standard information on how to prepare emergency plans and how to respond to emergencies. Every reasonable effort has been made to ensure the accuracy of the material. The agencies and authors do not assume any responsibility nor liability in how the reader uses the information or the effect of any recommended practice, procedure, or product specified in this guidance or handouts provided in training.

TABLE OF CONTENTS

List of Worksheets

Emergency Planning Guidance for Public and Private Water Utilities

Establishing a Planning Team

THE NEED FOR A PLANNING TEAM

Effective emergency preparedness, response, and recovery begins long before the emergency occurs. Many agencies, both public and private, are often aware that they need to prepare for emergencies, but are unsure how to begin.

CREATING THE TEAM

A crucial step in effective planning is establishing a planning team. This part of the guidance is designed to help you determine who should be on the planning team and provide some helpful hints about how the team should operate to create an effective, user-friendly emergency plan. While one person may write the plan, an effective plan requires the expertise and input of many persons.

BUY-IN

An important factor in developing your team is obtaining "buy-in" for planning from the top management of the water utility. Without this commitment, some department or division managers may not be willing to devote the necessary resources (personnel and equipment) required to develop the plan and train an effective staff capable of its implementation during emergencies. In addition, the plan will only be successful if everyone understands its purpose and how it will be implemented.

TEAM MEMBERS

Who should be on the team and who is "in charge" are important questions to answer prior to beginning the planning process. As you read this guidance, it will become clear that the most effective planning will involve people from within and outside of the water utility. The planning team will typically include members from the following disciplines within the utility: engineering and operations, emergency preparedness, security, safety, planning, customer services, administration, finance, training, and management. Team members from outside the utility may include: the local emergency services agency (essential), fire and police agencies, health department, Red Cross or Salvation Army, amateur radio operators, and other organizations located in the utility's service area involved in preparing for or responding to emergencies and disasters.

WHO'S IN CHARGE

It is not necessary for a manager or other policy maker to be in charge of the planning process. Management must make the commitment to plan and will exert its authority by approving the plan and ensuring it meets the policies and authorities the agency operates under. The planning team leader will often be a preparedness or emergency services person within the utility. For smaller utilities without such expertise, someone with planning experience and leadership skills is often capable of performing these duties. Utilities may also contract with consulting firms to provide such services or receive help from their local emergency services agency.

ESTABLISHING RULES

Once the team has been formed, ground rules must be established to ensure that all members have the opportunity to contribute. The planning process can become very stressful as different people or groups attempt to inject ideas or requirements that are important to them. The team leader must ensure that one person or faction does not dominate the process and take control. Remember, everyone selected for the team is participating because their education, knowledge, and skills are required to make the plan a useful tool during an emergency.

ASSIGNMENTS

Each member should be assigned portions of the plan to develop based on their knowledge and skills. Their assignments and the objectives they must achieve must be clearly explained. Adequate time must be provided for sufficient research and development. The emergency preparedness survey form provided in the Appendices may help the utility begin its evaluation. Someone must also be assigned to write or assemble the plan. Provisions must be made for typing, reproduction, and distribution of draft and final copies of the plan.

PRE-INCIDENT PLANNING

Planning is the key to successful response to and recovery from an emergency. However, there is much more to planning than producing an emergency plan. In general, the topics listed below will guide the utility in the development of a plan which will allow operation of the utility during any emergency.

- Conduct a hazards assessment and vulnerability analysis and implement recommendations.
- Develop and/or participate in Mutual Aid/assistance agreements.
- Maintain inter-agency contact lists, including 24-hour contact lists for other utilities upon which the water utility is dependent.
- Develop and practice a utility-wide emergency plan, including damage inspection procedures.
- Update the plan on a regular basis.
- Identify and develop alternate water sources, such as inter-ties with other water agencies. Include temporary sources for emergency water

supplies, such as water trucks or buffaloes, and supplies of bottled water.

- Develop contact lists for off-duty response.
- Conduct and maintain comprehensive mapping of all customer service areas, facilities, pipelines, and maintain copies in the Emergency Operations Center (EOC).
- Determine how business will be conducted during and after an emergency, including payment methods and communications with customers.
- Enter into prearranged contracts for water, food, and supplies.
- Develop resource lists for items expected to be needed during response.
- Develop cost accounting and recovery systems that meet federal (*FEMA, SBA*) and state (*OES*) reimbursement requirements, including how information will be collected during all phases of the emergency, and how expenditures will be tracked.
- Develop plans to assist employees and their families during the emergency (*home and work*). They should include a family/employee communication system, list of emergency contacts for other agencies, and essential records which have been duplicated and stored at off-site locations.
- Develop a working relationship with local media agencies and develop procedures for interaction. Train personnel who can speak for the water utility.
- Regularly test emergency equipment, such as backup generators under full load, and emergency lighting in a simulated blackout.
- Maintain emergency communications equipment and train employees in proper use. Training should address FCC regulations and how to contact other emergency organizations such as fire and police.

Section 1:
Introducing the Plan

The following sections describe how to introduce the plan to the reader.

TITLE PAGE

The Title Page quickly describes basic information for the reader. It should, at a minimum, have the name of the document, the water utility it is written for, and the date of publication. A Worksheet is included on page 3 for creating a Title Page.

PREFACE

The Preface provides comments about the production of the document, its timeliness, or reference to current situations or anticipated changes in the near future. References to past related events may be relevant. The Preface is usually one page and is often written in letter fashion from the water utility manager. A Worksheet for creating a Preface is on page 4.

EXECUTIVE SUMMARY

The Executive Summary provides a short and concise overview of the document's purpose and scope. The Executive Summary is usually one page and is often written in a non-technical letter fashion from the water utility manager to the utility's executive body. The Worksheet on page 5 may assist in drafting the Executive Summary.

RECORD OF CHANGES FORM

Every plan should be reviewed and revised annually and should have an easily identifiable way of documenting the changes to the plan. The Worksheet on page 6 provides a way to track such changes.

TABLE OF CONTENTS

The Table of Contents should be organized so that readers can quickly find major categories of information. It will generally have a main body containing the basic plan. It will also usually have appendices (glossary, forms, checklists, etc.) and a list of references. The Worksheets in this guidance can be used to draft an emergency plan and be placed in the proper order to create the Table of Contents. The Worksheet on page 7 can be utilized for developing a Table of Contents.

INTRODUCTION

This section of the plan provides a short description of the purpose of the

document and its intended audience. It briefly describes all portions of the plan, giving the reader a quick idea of its total scope and content. The Worksheet on page 8 can be used to develop an Introduction.

(Water Utility)
Emergency Response and Recovery Plan

(Date: _____)

PREFACE WORKSHEET

Preface:

The (Water Utility Name) Emergency Response and Recovery Plan is designed to address organized response to emergency situations associated with natural disasters, technological incidents, and national security emergencies in, or affecting, the (Water Utility Name) facility and its service area.

The Emergency Response and Recovery Plan has been prepared by the (Water Utility Name) in cooperation with the following persons and agencies:

Worksheet Note:

INDIVIDUALS who provided support for the document such as the author(s), team members, and individuals who made special efforts to assist in preparing the document should be listed here in alphabetical order.

CONTRIBUTING AGENCIES involved in providing data or support to the final plan should be listed in alphabetical order.

EXECUTIVE SUMMARY WORKSHEET

The (Water Utility Name) is located (include information on location, facility size, service area, number of connections etc.).

This document is designed to prepare the (Water Utility Name) for a planned response to emergency situations associated with natural disasters, technological incidents, and national security emergencies in, or affecting, a water utility facility and its service area. This plan describes the following:

- (Water Utility Name) emergency management organization required to assist in mitigating any significant emergency or disaster.

- Authorities, policies, responsibilities, and procedures required to protect the health and safety of customers, personnel, and facility property.

- Operational concepts and procedures associated with field response to emergencies, Emergency Operations Center (EOC) activities, and the recovery process.

- Implementation of the Standardized Emergency Management System (SEMS) for use within (Municipality), (County) Operational Area, regional, and state systems.

- Multi-agency and multi-jurisdictional coordination, particularly between the (Water Utility Name) and local, state, and federal agencies during emergency operations.

- Pre-event emergency planning as well as emergency operations procedures.

This plan has been designed for conformance with SEMS (Government Code Section 8607) and should be used in conjunction with the State Emergency Plan and local emergency plans.

Note: The utility should have a copy of section 8607 for use in preparing this document.

RECORD OF CHANGES WORKSHEET

Record of Changes

The purpose of this page is to note when changes were made to the Emergency Response and Recovery Plan.

Date	Chapter/Section/Page	Approved By:
1.		
2.		
3.		
4.		
5.		

TABLE OF CONTENTS WORKSHEET

Topic (List parts of document by section or chapter)	**Page** (List beginning page # of section or chapter)
Preface	
Executive Summary	
Record of Changes	
Table of Contents	
Introduction	
Section 1	
Section 2	

INTRODUCTION WORKSHEET

(Paragraph that defines the purpose of the document and the intended audience. The Purpose is usually less than a half page.)

(Paragraph that describes the limitations of the Water Utility Emergency Response and Recovery Plan in intent, time frame, and geography. The Scope is usually less than a half page.)

(Paragraph that includes a brief description of the various sections of the Water Utility Emergency Response and Recovery Plan.)

Section 2:
Authorities and Policies

The purpose of this section is to describe how laws, regulations, and existing policies impact the emergency planning process. This section also introduces the types of internal policies that may be developed which clarify the utility emergency response goals and authorizes staff to take appropriate actions consistent with those goals.

Emergency planning is required by various legislation and regulation, and is an essential and very effective business practice. In recent years the seasons in California seem to have changed from winter, spring, summer and fall to those of more significant proportion: earthquake, floods, firestorms, and hazardous materials spills. With these perilous events affecting all levels of business and government, water utilities have had to accept and prepare for every emergency condition or catastrophic event.

Despite the impact a given disaster has on a water utility, customers require a quick response and restoration of their water supply. When they turn on the tap, they expect safe water. Water utilities similarly expect that when a disaster strikes, their employees will respond to the need of the utility. Without proper planning and preparation, employees will lack the guidance and training necessary to conduct an adequate response to the emergency.

AUTHORITIES

Authorities are included in the emergency plan to identify what directs the development of a utility emergency plan. Authorities outline the laws or legal powers given to a water utility, or the laws that requires specific action. A list of legal authorities remind the planners, responders, management, and employees why emergency plans are required. From the authorities, specific types of planning occur, particular documents must be prepared, training conducted, and materials/equipment obtained to support the plan.

The following laws and references authorize or require the water utility to create, manage, and activate an emergency plan, utilizing its powers to take actions and carry out the responsibilities described in the plan.

California Emergency Services Act (1952, amended 1970, 1986 and 1992, and referred to as the "Act"). Authorizes all political subdivisions of

the state (special districts, cities, and counties) to conduct emergency operations. Such action can take place in response to an emergency that immediately overwhelms local resources. Recent additions to this Act include Government Code section 8607 which requires the use of the Standardized Emergency Management System by local government and special districts if they want to recover certain emergency response costs. It also includes 8607.2(a) which requires public water agencies with more than 10,000 service connections to review and revise their emergency plans in conjunction with local government agencies. These plans should follow the Incident Command System concepts.

Other water utilities should consider conducting similar reviews as a means of using best management practices to avoid potential liability.

California Government Code, Title I, Division 4, Chapter 8, Section 3100. Identifies public agency employees as Disaster Service Workers.

California Department of Health Services, Office of Drinking Water, Public Health Notification. The *Boil Water* and *Unsafe Drinking Water Notification* outlines public notification and water quality procedures to follow in emergencies.

California Emergency Plan. The California Emergency Plan outlines the state's response to help local government respond to disasters. Under Government Code section 8586, the plan is in effect in each political subdivision of the state, and states that the governing board of each political subdivision shall take such actions as may be necessary to carry out the provisions thereof. Procedures for requesting aid and managing a statewide emergency organization are included. This guidance is consistent with the California Emergency Plan. All utilities are encouraged to develop plans to support local government response to emergencies.

POLICIES

An emergency plan needs to outline the policies that require or guide the water utility's preparedness program. They identify the utility's position-specific emergency response activities and authorize staff to take action. Policies alert employees, managers, and customers that the utility is aware of the vulnerabilities facing the service area.

Examples of policies (from the East Bay Municipal Utility District) may include:

District Resolution 32580, February 25, 1992. Adopts the District's Mission statement which is supported by eight goals and subsequent objectives, including emergency preparedness.

District Resolution 32721, March 23, 1993. Authorizes the General Manager to manage the creation and maintenance of an emergency preparedness program that includes development and exercise of an emergency plan. Powers of the General Manager and other staff are also outlined.

District Personnel Policies. Policy Number 15 states that employees are expected and required to work in emergency situations. Current MOUs with represented employees support this and require employees to work overtime. The number of hours worked cannot exceed 16 hours in any given 24 hour period. This policy also allows the General Manager to grant special paid leave for those employees directly affected by the emergency.

Examples of resolutions adopting SEMS for public water utilities and a preparedness policy for all water utilities are provided on the following pages. Pursuant to the California Master Mutual Aid Agreement, once the public water utility adopts the agreement by resolution, a certified copy of the resolution must be forwarded to the California Office of Emergency Services. The water utility may want to consider adopting a policy relating to its participation in the Water Agency Response Network (WARN). More information about WARN can be found in Section 10 - Mutual Aid & Assistance. A Worksheet, which may be used to list authorities and policies, follows these examples.

EXAMPLE RESOLUTION ADOPTING SEMS (For Public Water Utilities)

RESOLUTION NO._____

ADOPTING THE CALIFORNIA STANDARDIZED EMERGENCY MANAGEMENT SYSTEM, MASTER MUTUAL AID AGREEMENT, AND OPERATIONAL AREA AGREEMENTS

Introduced by: Seconded by:

WHEREAS (Water Utility) facilities, properties, and employees are located where numerous natural or human caused catastrophes may occur and that could affect local or regional areas, and

WHEREAS (Water Utility) facilities, systems, and personnel have actually experienced federal and state declared disasters in the last six years; and

WHEREAS the greater efficiency for emergency and disaster preparedness, response, recovery, and mitigation can be achieved by joining efforts between all political subdivisions, including cities, counties, special districts, other public benefit non-profit corporations, and utilities in the development and implementation of Operational Areas; and

WHEREAS the Standardized Emergency Management System regulations identify the need for all political subdivisions within the geographical area of a county to establish an Operational Area to act as an intermediate level of the state emergency services organization to support local government before and during emergencies; and

WHEREAS following the 1991 East Bay Hills Firestorm, State Senator Nicholas Petris authored a law to amend the California Emergency Services Act, creating the Standardized Emergency Management System (Government Code §8607) to ensure all responding agencies would plan and coordinate emergency response together by incorporating the Operational Area concepts and Master Mutual Aid Agreement; and

WHEREAS the (Water Utility) claims for State reimbursement of personnel response costs are contingent upon adopting and using the Standardized Emergency Management System; and

WHEREAS the (Water Utility) wishes to coordinate emergency and disaster planning and response with other agencies and to maximize the ability to recover costs incurred during response;

BE IT THEREFORE RESOLVED that the Board of (Water Utility) hereby adopts the State of California Standardized Emergency Management System, Master Mutual Aid Agreement,

and Operational Area concepts as the means by which the (Water Utility) will plan and respond jointly with other emergency response agencies; and

BE IT FURTHER RESOLVED that all (Water Utility) emergency plans and emergency response training shall reflect the use of the Standardized Emergency Management System, Operational Area concepts, and Master Mutual Aid Agreement and the compliance standards thereof; and

BE IT FURTHER RESOLVED that the (Water Utility) enter into and participate in Assistance and Operational Area Agreements to facilitate joint preparedness and response; and

BE IT FURTHER RESOLVED that the (General Manager) take the steps necessary to effectuate these and future agreements which shall be in a form approved by the General Counsel.

ADOPTED this __ day of _____ by the following vote:

AYES: NOES:

ABSENT: ABSTAIN:

General Manager:

Secretary:

General Counsel:

EXAMPLES OF A PREPAREDNESS POLICY

East Bay Municipal Utility District (EBMUD)

IT IS THE POLICY OF THE EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD) TO:

Create and maintain an active emergency preparedness program that includes an emergency plan that will help manage the District's critical functions during any emergency and protect the safety of staff. The District will coordinate the emergency plan, function and response with those responders from other public and private entities and organizations charged with emergency duties.

Emergency: Emergency means the actual or threatened existence of conditions of disaster or of extreme peril to the provision of critical District functions and the health and safety of staff or the public, caused by such conditions as fire, severe storm, riot, hazardous materials releases, earthquake, power outages, dam failures, freezes, water supply contamination, and other conditions which may be beyond the capability of the services, personnel, equipment and facilities of this District, and may require the combined forces of other political subdivisions to help respond.

Emergency Preparedness: The Board of Directors has authorized the establishment of an Emergency Preparedness Program, which consists of the nationally recognized four phases of emergency management: mitigation, preparedness/planning, and response and recovery. District actions will include developing and maintaining a District-wide emergency plan, identifying and training District staff to activate and use the plan, appointing District staff to critical positions identified in the emergency plan, and appointing staff to represent the District in negotiations or consultations with public and private agencies on matters pertaining to response to the emergency and recovery of damaged systems and financial costs incurred during the emergency. The Emergency Preparedness Office will facilitate progress on this program.

Standardized Emergency Management System: The State Office of Emergency Services regulates the Standardized Emergency Management System (SEMS), which was created by Government Code §8607 following the East Bay Hills Firestorm. To ensure reimbursement for claims filed after a disaster, all District emergency plans, procedures, and training will follow the SEMS regulations, and coordinate with the District-wide emergency plan.

District Emergency Declaration: When an emergency condition arises, the General Manager may, in consultation with the Board President, declare a "District Emergency". The declaration must be ratified by the Board within 14 days at either a scheduled or emergency Board Meeting.

Authorizations During District Emergencies: The General Manager's declaration of a District Emergency is a public acknowledgment of the serious situation the District faces, and that the District's resources may not be adequate to respond to the emergency. The General Manager, or successor in consultation with the President of the Board of Directors, is authorized to suspend

competitive bidding and enter into emergency contracts of up to $250,000, as authorized by District Resolution 32403.

Emergency Operations Director: The District emergency plan will identify a District Manager to serve as the Emergency Operations Director (EOD) who will have the authority for developing plans, training staff and activating the emergency plan. In consultations with the General Manager, the EOD will identify staff to fulfill the planning and response duties listed in the emergency plan. As the need arises the EOD may direct all human or material resources owned by the District to combat the effects of a threatened or actual emergency.

Mutual Aid: The California Master Mutual Aid Agreement (Government Code §8561, §8615 and §8617) allows for the implementation of mutual aid during threatened, actual, or declared emergencies. The General Manager, Emergency Operations Director, and their successors, in accordance with the emergency plan, may request mutual aid assistance from other local government and public agencies, or commit District resources to other agencies requesting aid. The General Manager may sign appropriate documents to effectuate mutual aid and other emergency response agreements.

Continuity of Management: The District's emergency plan will list at least three successors to critical staff identified in the plan, including the General Manager. In the event the primary person is unable to respond to an emergency, each successor, in order, may assume all the duties and powers of the primary staff.

Status Reports: The General Manager will provide annual reports to the Board of Directors on the progress of the Emergency Preparedness Program. Additional reports will be given to the Board on the effectiveness of the plan and District response within 60 days of the occurrence of a declared District Emergency.

Authority: Resolution No. 32922-95, May 23, 1995.

References: District Emergency Operations Plan, MUD Act 12753, Purchasing Procedure 4.02 - Emergency Purchases

Southern California Water Company

EMERGENCY PLANNING AND PREPAREDNESS

Policy

Southern California Water Company (SCWC) will have and maintain a standardized Emergency Response and Recovery Plan containing vital information for responding to, and recovering from, an emergency.

A company-wide Standardized Emergency Management System (SEMS) will be used to ensure compatibility with state and local emergency response systems (in accordance with State of California Government Code 8607). SCWC will train all employees regarding their duties during and after an emergency.

Goals of the Emergency Response and Recovery Plan

The goals of the Emergency Response and Recovery Plan are to:

- rapidly restore service after an emergency
- ensure adequate water service for fire suppression
- minimize water or electrical system damage
- minimize impact and loss to customers
- provide emergency public information concerning customer services

AUTHORITIES AND POLICIES WORKSHEET

Authorities

(List state and local laws and resolutions regarding emergency planning. Examples include California Emergency Services Act, hazardous materials handling, and health services law.)

Policies

(List utility policies regarding emergency planning. Examples include Emergency Preparedness Policy, employee time off, etc.)

Resolutions

(The example resolutions serve as Worksheets for the guidance user.)

Section 3:
Hazards Assessment and Vulnerability Analysis

The purpose of Section 3 is to provide one example of how to conduct a hazard assessment and vulnerability analysis for a utility. Each utility needs to identify its own process for accomplishing this assessment and analysis. A hazard assessment and vulnerability analysis are processes that a utility's emergency planning team can use to identify the impacts a major emergency may have on a utility. A hazard assessment provides a utility-wide perspective of the different types of emergencies that a utility may experience. The information gathered in the hazard assessment is then used, in conjunction with the information gathered in the vulnerability analysis, to determine how specific facilities within the utility's system may be affected by various types of emergencies. The utility may then develop hazard-specific response plans and/or mitigation measures for responding to an emergency.

Public water utilities with 10,000 connections or more may wish to conduct a hazard assessment and vulnerability analysis to partially meet the requirements of the Emergency Services Act (Government Code Section 8607.2(a)), which states:

"*... examine and review pumping station and distribution facility operations during an emergency, water pressure at both pumping stations and hydrants, and whether there is sufficient water reserve levels and alternative emergency power such as onsite backup generators and portable generators*".

Other water utilities with less than 10,000 connections may wish to use the same processes as a best management practice in emergency planning.

ESTABLISH AN EMERGENCY PLANNING TEAM

It is important for whoever is responsible for emergency planning to have a comprehensive understanding of the potential impacts of such events on a utility's facilities, customers and employees, in order to develop effective plans for responding to the emergency. The hazard assessment and vulnerability analysis process is best completed by an emergency planning team that may include staff from operations, maintenance, engineering, safety, purchasing, and customer service. This planning team will be able to create a broad perspective of how an emergency may impact

the utility. The use of this team also provides greater buy-in by staff, who together may be able to devote a combined greater amount of time to developing response plans. It may be beneficial to include external community participants as part of the emergency planning team. Representatives from other local utilities (i.e. telephone, electrical, etc.), local government representatives, and emergency response professionals can provide valuable input in their different areas of expertise.

HAZARDS ASSESSMENT PROCESS

The actions listed below will help an emergency planning team perform a hazard assessment. A hazard may be defined as a condition that has the potential to result in equipment or system failure that could result in human injury or death, loss of utility service, adverse financial impact, adverse public image impact, or environmental degradation. A hazard can include the most commonly thought of emergencies like earthquakes, fire, or floods. In addition, there are other hazards that are often overlooked by utilities that can have a significant impact on the utility's ability to deliver service to customers. Some examples of these additional hazards may include fuel shortages, loss of a key supplier, major accident at an adjacent facility, or a severe public relations problem (i.e. rumor of a water quality problem). A hazard assessment broadly contrasts the types of hazards that could affect a utility and determines which hazards pose the greatest risk of occurrence.

A Four-Step Process

By the end of this process, a utility will be able to summarize the hazards and the possible effect on the utility. Refer to the table contained on the following page as you work through the hazard assessment process.

Step 1: Identify the Hazards That Might Occur

Create a list of potential hazard types that could affect utility operations. The emergency planning team should make an effort to include every hazard that could effect the utility, across the utility's entire service area.

Hazard types may be separated into three hazard category types:
Natural Events - earthquake, fire, flood, landslide.
Man-Made Events - terrorism, environmental incidents, water contamination, civil disturbance.
Technological Events - failure of electrical/electronic equipment, including remote sensing equipment, communication or computer systems.

Utility:	XYZ Water Company

Location: Dixon Lake Treatment Facility

Date of Assessment: June 1996

Hazard Assessment			
Hazard Type	Probability of Occurrence	Reaction Factor	Hazard Rating
Step 1	Step 2	Step 3	Step 4
Natural Events			
Earthquake	3	3	9
Aqueduct Failure	2	3	6
Severe Storm	2	2	4
High Winds (70+ Mph)	2	2	4
Landslide	0	3	0
Flood	1	2	2
Drought	2	1	2
Hurricane	0	1	0
Man-made Events			
Waterborne Disease	2	2	4
Fire/Arson	1	3	3
Loss of Key Staff	1	2	2
Fuel Shortage	1	1	1
Terrorism/Sabotage	1	3	3
Technological Events			
Dam Failure*	0	3	0
Power Outage	3	3	9
HVAC Failure	2	2	4
SCADA Failure	2	2	4
Computer Virus	3	3	9

** Note: Utility XYZ does not have a dam*

Step 2: Clarify the Probability of a Hazard Occurring

For each listed potential hazard rate the potential probability of the hazard occurring within your utility service area (0 = Not Applicable, 1 = Low, 2 = Medium, 3 = High).

Step 3: Assess a Reaction Factor

A reaction factor is an estimate of the utility's ability to forecast the approach of the hazard and react (3 = no early warning, 2 = short duration early warning, 1 = long early warning). The ability of the utility to forecast the hazards approach and respond prior to the emergency occurring can have a great effect on the damage the utility sustains and how quickly they can recover and return to normal operating conditions.

Step 4: Determine a Hazard Rating

The hazard rating is the probability of occurrence multiplied by the reaction factor. The higher the hazard rating, the greater the potential of the hazard affecting the operations of the utility.

When the hazard assessment is completed, the emergency planning team has a better idea which hazards are likely to pose the greatest risk to the utility (i.e. earthquake = 9, power outage = 9). The hazard with the highest hazard rating number is the hazard that poses the greatest risk to the utility's operations. The lower the number, the lower the risk. The hazard rating number is intended to aid the utility in prioritizing the hazards based on their potential impact. With this data a water utility can begin to assess the impact each emergency would have on its system by conducting a vulnerability analysis.

VULNERABILITY ANALYSIS PROCESS

The following actions will guide the emergency planning team in performing a vulnerability analysis. The vulnerability analysis is intended to show how the utility's systems and critical facilities may be affected by potential hazards. A thorough vulnerability analysis is intended to identify impacts on the system to help staff develop appropriate emergency response plans, reduce the risk of system loss, minimize damage, reduce repair costs, and/or assist water managers in the planning, justification, and implementation of mitigation projects.

A Three-Step Process:

Step 1: Orient Evaluation Team

In order to evaluate the vulnerabilities of a water system, team members may need to be oriented on what to review and consider in evaluating the effects of previously identified hazards on the various components of the utility's water system. Staff or consultants with specialized skills in various areas may prove valuable during this process. These skills may include engineering, communications, electrical/electronic instrumentation, and geology. To complete the analysis requires commitment of resources and may include detailed engineering evaluations or specialized expertise which is beyond the scope of this document.

Step 2: Conduct Facility or Site Inspections and Inventories

A facilities and equipment inventory may be conducted for each site location and facility. It is important to identify equipment condition, facility age, future planned maintenance, projects in work, or planned site impacts and risk mitigation. Inventory worksheets are helpful for planning, budgeting, and cost analysis. Examples of the areas to be addressed during this step include:

- Identify key alternative water production, storage, and distribution resources.
- Identify utilities upon which your operations are dependent, i.e., electrical power, communications, transportation.
- Inspect and inventory each one of the key system components (i.e. dams, reservoirs, tanks, pipelines, flow control structures, administration facilities, maintenance facilities, etc.) and identify key pieces of equipment and critical information for each component. Critical information may include such items as manufacturer identification, size, pressure zone, shutoff valve locations, facility maps, repair procedures, material and supply information, and emergency contacts.

Step 3: Complete a Vulnerability Analysis for Each Critical Facility

Task One in the vulnerability analysis is to list key elements of the water utility's system and the key components of each of these elements. A partial list is shown below. This list will be a valuable aid in assuring that each key component of the utility's system is evaluated during the vulnerability analysis process.

Task Two is to rate the value of each component of the system according to its impact on operations should it no longer function. After each component of the utility's system is listed, evaluate each component on its impact to the system if lost during a disaster. Each component is assigned a number reflecting the priority for restoration of service (i.e., 1 is most important). As an example, a failure of several distribution lines in one portion of the service area would have less impact on the utility than the failure of the treatment plant or storage reservoir. The restoration of the treatment plant would be rated a higher priority for restoration when compared to the restoration of the distribution lines. During this phase of the vulnerability analysis it is advisable for the utility to review previously established goals for acceptable levels of service. This list now becomes the system restoration priority list, reflecting the sequence of restoration the utility would employ when restoring service during an emergency.

Utility: XYZ Water Company	
Location: Dixon Lake Treatment Facility	
Date of Assessment: January, 1998	
System Restoration Priority List	
System Components & Key Elements	Restoration Priority

Treatment Facilities	
Dixon Lake Treatment Facility	1
Storage Tanks	
Adams Tank	2
Transmission Pipelines	
West Pipeline	3
East Pipeline	4
Distribution Pipelines	
North Street	5
South Street	6
Communications System	
Interagency Radio	7
SCADA System	8
Electrical System	
Charles River Standby Generator	9
Rincon Hydro Facility	10

Task Three in a vulnerability analysis is to determine the effects of the potential hazard on each of the system components listed in task two. The first system component evaluated would be the system component that received the highest priority for restoration (i.e. Dixon Lake Treatment Facility). A form which includes hazard assessment information, similar to the chart shown on the following page, is developed for each system component to document the analysis for future planning and mitigation purposes.

Note: The hazard assessment information completed in steps 1 through 4 of the hazard assessment process is based on the potential hazards that could impact the entire utility. These hazard ratings may need to be changed slightly to reflect the conditions at the facility you are now evaluating or its geographical location within the utility's service area. In most cases, the utility-wide hazard assessment information will change very little when evaluating a single site or system component.

The potential system impact is rated based on the potential impact on the utility system of losing the site or component being evaluated (0 = Not Applicable, 1 = Low, 2 = Medium, 3 = High).

Utility:	XYZ Water Company
Location:	Dixon Lake Treatment Facility
Date of Analysis:	February 1, 1998

Hazard Assessment				Vulnerability Analysis	
Hazard Type	Probability of Occurrence	Reaction Factor	Hazard Rating	System Impact	Weight
Natural Event					
Earthquake	3	3	9	3	27
Aqueduct Failure	2	3	6	3	18
Severe Storm	2	2	4	3	12
High Winds (70+ mph)	2	2	4	3	12
Landslide	0	3	0	3	0
Flood	1	2	2	3	6
Drought	2	1	2	3	6
Hurricane	0	1	0	3	0
Man-made Events					
Waterborne Disease	2	2	4	3	12
Fire/Arson	1	3	3	3	9
Loss of Key Staff	1	2	2	3	6
Fuel Shortage	1	1	1	3	3
Terrorism/Sabotage	1	3	3	3	9
Technological Events					
Dam Failure*	0	3	0	3	0
Power Outage	3	3	9	3	27
HVAC Failure	2	2	4	3	12
SCADA Failure	2	2	4	3	12
Computer Virus	3	3	9	3	27

** Note: Utility XYZ does not have a dam*

A final weighted factor, shown in the far right column, is obtained by multiplying the system impact by the hazard rating. The final weighted number is used by the emergency planning team to compare and prioritize components for planning and mitigation purposes. The higher the number in the far right column the greater impact that hazard would have on the specific site being evaluated and on the ability of that utility to continue normal operations. Comparing the final weighted number of multiple sites within a utility will aid the emergency planning team in prioritizing system components for planning and mitigation purposes.

MITIGATION

With the information collected during the hazard assessment and vulnerability analysis the utility can take action to better prepare for an emergency. The utility should consider the following options:

Create a response plan based on vulnerability priorities. The response plan would contain operational procedures to restore service to normal operations. Contents of this plan would contain standard operating procedures (SOPs) for responding to each hazard. SOPs may include system response, assessment, repair, responsibilities, alternative system operations, and notification priorities. Prioritize needed procedures, assign

responsibility, and develop a schedule with critical milestones for implementation.

Create a hazard mitigation improvements program. Each site should be evaluated based on the risks associated with specific hazards. As an example, the Dixon Lake Treatment Facility would be inspected and improvements suggested for eliminating or reducing potential damage that could result from an earthquake. Earthquake mitigation efforts may include reinforcing steel pipe support stands, reinforcing support columns for decking, installing additional horizontal bracing, etc. When earthquake mitigation efforts are complete, the site should be inspected and efforts taken to protect the site from damage associated with a power outage.

Evaluate the improvements needed to minimize or avoid risk considering the economics of desired improvements, level of risk acceptable to the utility, and the level of service that must be maintained during emergencies. Prioritize needed improvements, assign responsibility, and develop a schedule with critical milestones for implementation. Desired improvements can be phased in over a number of years to control capital cost impact.

WORKSHEET FOR COMPLETING A HAZARD SUMMARY

Utility: _____

Location: _____

Date of Assessment: _____

Hazard Assessment			
Hazard Type (Step 1)	Probability of Occurrence (Step 2)	Reaction Factor (Step 3)	Hazard Rating (Step 4)
Natural Events			
Man-made Events			
Technological Events			

WORKSHEET FOR DESCRIBING RESTORATION PRIORITIES

Utility: _____

Location: _____

Date of Assessment: _____

System Restoration Priority List	
System Components & Key Elements	Restoration Priority
Treatment Facilities	
Storage Tanks	
Transmission Pipelines	
Distribution Pipelines	
Communications System	
Electrical System	
Other	

WORKSHEET FOR A VULNERABILITY ANALYSIS SUMMARY

Utility: _____

Location: _____

Date of Analysis: _____

Hazard Assessment				Vulnerability Analysis	
Hazard Type	Probability of Occurrence	Reaction Factor	Hazard Rating	System Impact	Weight
Natural Events					
Man-made Events					
Technological Events					

Section 4:
The Standardized Emergency Management System (SEMS)

The purpose of this section is to orient water utilities to the history, goals, and objectives of the Standardized Emergency Management System (SEMS), including examples of how to integrate SEMS into public and private water utility field operations and Emergency Operations Center (EOC) operations. The benefits of integrating SEMS into the utility's emergency organization are also discussed.

Response activities must be performed rapidly and effectively during any emergency. This applies to activities being conducted at the scene of an incident, as well as at the incident command post, or the local water utility EOC which is coordinating and supporting field operations. To accomplish this, the Standardized Emergency Management System was developed. SEMS is intended to standardize response to emergencies involving multiple jurisdictions or multiple agencies. SEMS is designed to be flexible and adaptable to the needs of all emergency responders in California. The basic components of SEMS are the Incident Command System (ICS), multi-agency or inter-agency coordination, the operational area concept, and the mutual aid system.

SEMS must be used by all state agencies and any local public agencies (cities, counties, special districts) seeking personnel-related emergency response costs. In order to be in compliance with SEMS, public agencies must meet requirements in the areas of planning, training, exercises, and performance.

COMPONENTS OF SEMS

Incident Command System (ICS)

The Incident Command System is the nationally used, standardized, on-scene emergency management concept specifically designed to allow its user(s) to adapt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of resources to effectively accomplish stated objectives pertinent to an incident.

Multi-Agency / Inter-Agency Coordination

Multi-Agency/Inter-Agency Coordination is the participation of agencies and disciplines, involved at any level of the SEMS organization, working together to facilitate decisions for overall emergency activities, including sharing of critical resources and the prioritization of incidents.

Operational Area Concept

The Operational Area concept represents the intermediate level of the state emergency organization, consisting of a county and all political subdivisions within the county area, including water districts. Operational Area management staff and mutual aid coordinators locate and mobilize resources requested by local government.

Mutual Aid System

The Mutual Aid System is based upon statutory provisions and upon agreements entered into by and between the State of California, its various departments and agencies, and the various political subdivisions, municipal corporations, and other public agencies of the State of California to assist each other by providing resources during an emergency. Mutual Aid occurs when two or more state or local government agencies furnish resources and render services to each other in an emergency in accordance with the applicable statutory provisions, the State Emergency Plan, the California Master Mutual Aid Agreement or local ordinances, resolutions or agreements.

SEMS LEVELS

There are five designated levels in the SEMS organization: field response, local government, operational area, regional, and state. The type and severity of the emergency will determine the extent of activation for each level.

Field Response

The Field Response level commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

Local Government

Local Government includes cities, city and county, counties, school districts, or special districts (including water utilities).

Operational Area

The Operational Area concept represents the intermediate level of the state emergency organization, consisting of a county and all political subdivisions, including water districts and other special districts, within the county area.

Regional

Because of its size and geography, the state has been divided into six mutual aid regions. In SEMS, the regional level manages and coordinates information and resources among operational areas within the mutual aid

region, and also between the operational areas and the state level. A map of the Mutual Aid Regions is found on page 94.

State

The state level manages and coordinates state resources in response to the emergency needs of the other levels, and manages and coordinates mutual aid among the mutual aid regions and between the regional and state levels. The state level also serves as the coordination and communication link between the state and federal disaster response system.

SEMS FUNCTIONS

There are five designated functions within SEMS. They are Management ("Command" at the Field Level), Operations, Planning/Intelligence, Logistics, and Finance/Administration. These functions are described below.

Management

The EOC Director has overall responsibility for all emergency functions. The Director may retain and/or delegate authority for functions listed below.

Operations

Coordinates emergency response activities at the water utility EOC level and implements the priorities established by management. Operations staff include field coordinators, as necessary, linked to water utility personnel at other fixed facilities or assigned to incidents within the water utility. The field coordinator receives and passes information and receives and coordinates requests for services and support.

Planning/Intelligence

Oversees the collection, evaluation, verification, and display of current information related to the emergency. Information sources include Operations field coordinators, direct contacts, and all available public and private sources. Planning is also responsible for preparing action plans, and maintaining documentation related to the emergency.

Logistics

Oversees the acquisition, storing, and distribution of essential resources and support services needed to manage the emergency. It tracks the status of resources. Logistics provides services to all field units in terms of obtaining and meeting their personnel, materials, and equipment needs, including communications.

Finance/Administration

Oversees the cost accounting associated with the emergency. Finance/Administration prepares vendor contracts, maintains records of expenditures for personnel and equipment, and maintains records and processes claims. It provides preliminary and follow-up estimates of damage costs and losses.

General Staff

Chiefs of the functions listed above are considered the General Staff and work closely with the EOC Director. Each of the five primary functions can have several sub-functions as necessary. Sub-functions will be established and staffed as Units, depending upon the nature and scope of the emergency. Personnel assigned to manage each of the five primary functions are responsible for all sub-functions, unless authority is delegated to others.

Command Staff

The Public Information, Liaison, and Safety Officers constitute the Command Staff and report directly to and are directly subordinate to the Incident Commander or EOC Director.

HOW TO USE SEMS

Field Response and EOC operations at any level of emergency activation must ensure that the appropriate SEMS functions are being accomplished. In minor emergencies, one person may be responsible for all primary functions and related sub-functions. As the emergency grows, the authority to manage primary functions and sub-functions may be assigned to others, if necessary. The EOC Director remains responsible for a function until it is delegated to another person.

A general rule governing the organizational structure under emergency conditions is that no individual should supervise more than seven sub-elements simultaneously. The optimum span-of-control for a supervisor to maintain during an emergency, is one-to-five.

Functions within the emergency organization must not be consolidated. While one supervisor may have responsibility for more than one function at a time, the Operations and Planning/Intelligence functions should have separate Chiefs. Functional units no longer required may be deactivated at any time.

WATER UTILITIES' COORDINATION WITH OTHER LEVELS OF GOVERNMENT

Water utility operations affect fire protection, public health, public safety, as well as most levels of government. It is critical for coordination to take place between water utilities and other agencies within the operational area (cities, county government, and other special districts). This coordination should include planning, training, and exercises. The figure on page 36 provides an example of where the water utility fits into the system.

The water utility's coordination with the local and state health departments is especially critical. Planning and emergency/recovery activities should include:

- Developing plans and procedures to evaluate the water system and ensure the safety of the water supply.
- Maintaining a list of local and state health department contacts and phone numbers for use during a disaster or emergency.
- Assessing the extent of damage to the system and whether the water supply is safe for use.
- Coordinating with local and state authorities in performing needed drinking water system protection activities.
- In coordination with local and state health authorities, informing the public regarding the safety of drinking water in the affected area. If the water is not safe, issuing appropriate information and instructions to the public on how to purify water or obtain potable water.
- Working with local and state health officials to ensure the rapid restoration of the water supply system and the provision of safe drinking water in the affected area.

INTER-AGENCY COORDINATION AND COMMUNICATION

Utility crews routinely coordinate and communicate with public safety and other agencies at the scene of emergencies. A number of utilities (both public and private) have provided crews with ICS training in order to promote a closer and more effective working relationship with public safety agencies. With the implementation of SEMS in December 1996, most public and many private utilities have incorporated SEMS training for designated staff.

Field Response

Local Government

As a general rule, utilities of all types, both public and private, have pre-established coordination and communications links with Local Government and Operational Area EOCs within their respective service territories. Depending on the type and size of the utility, the link may be with one or more cities and/or one or more counties.

Each public and private utility may have a unique reporting relationship with a local SEMS organization, depending on its service area. Some utilities are part of the local city government and confine service to that city. In such cases, the utility is part of the local city SEMS organization and reports to the city SEMS management. If the utility is not part of the city, but provides services only to that city, that utility may communicate and coordinate directly with the city. The city and utility should meet and discuss this arrangement prior to an emergency.

If a utility does report directly to a Local Government, the local emergency plan should describe where the utility reports. A position in the Operations Section is where the contact point will usually be located.

If the utility serves more than one city, depending on the type and size of the utility and nature and scope of the emergency, the communication link may be with one or more cities or with the Operational Area. In accordance with the utility's policy and/or practices, the coordination link with the city may be through a decentralized district, division, or a customer service center. Communications with multiple cities can be coordinated through a public affairs office or an EOC Liaison. Large utilities may have staff that can report to a city EOC within their service territory to provide a coordination link. These utility representatives would be activated to serve as liaisons to the city, and often these employees participate in annual city drills.

Operational Area

Like the reporting relationships with the local SEMS organization, each utility may have a unique reporting relationship with the Operational Area SEMS organization. Again, depending upon the service area of the utility, it may be most effective for the utility to communicate directly with the Operational Area, especially if it serves multiple cities within a county.

In some cases, an Operational Area may designate a county department or county-wide agency to support the effort to coordinate particular utility information. This department or agency may be part of the Operational Area SEMS organization. (It is recommended this position be part of the Operations Section.) In turn the representative at the Operational Area would communicate with the local and regional SEMS levels.

In accordance with each individual utility's policy and/or practice, the coordination link with the county may be through a decentralized district, division, a customer service center, or public affairs office. As available, larger utilities may have staff that can report to an Operational Area EOC within their service territory. These utility representatives are activated to serve as liaisons and may participate in annual Operational Area drills.

In any of these conditions, the county should meet with representatives of the utilities providing service to more than one city to discuss how reporting relationships can be arranged. If a utility serves more than one Operational Area, the most practical reporting relationship for the utility may be with the Regional Level. Liaison requirements for specific situations should be agreed upon in advance and reflected in coordinated emergency plans between/among the utility and affected jurisdictions.

Regional and State Operations Centers

OES operates three regional emergency operations centers (REOCs) located at the three regional offices. The state operations center (SOC) is located in Sacramento. The Utilities Branch is established, as needed,

within the Operations Section at the REOCs and/or SOC. Regional and State level utility-related emergency issues are addressed at these centers.

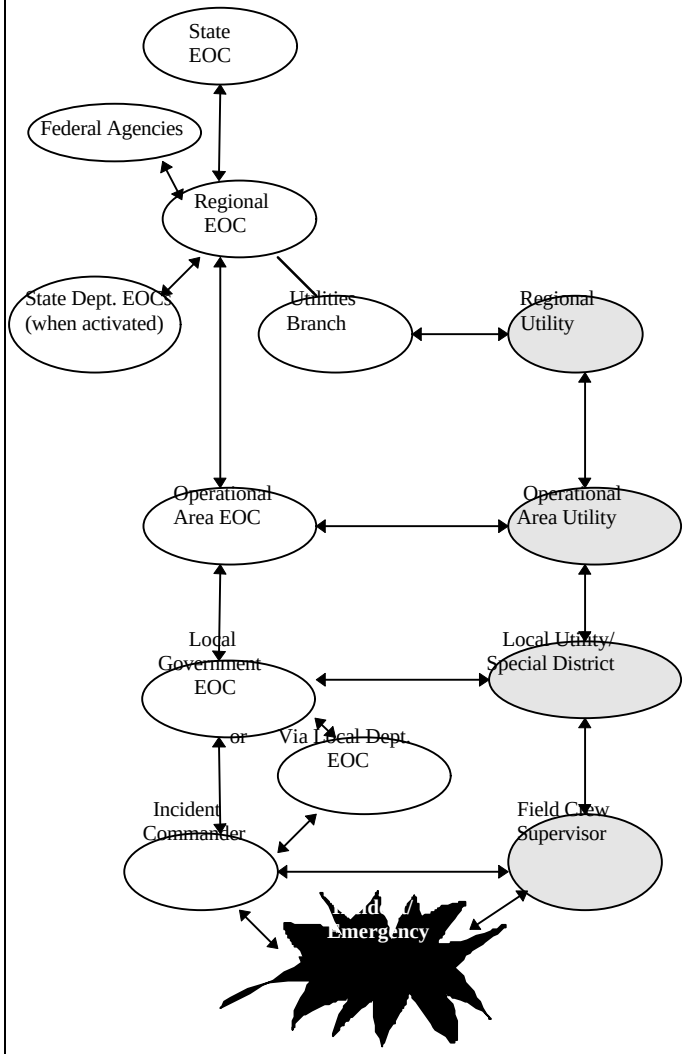
Utilities Branch

The Utilities Branch serves as a central point for collecting and disseminating information concerning the status of affected utility systems, resources available and restoration efforts. Utilities may provide updated status to the appropriate REOC or the SOC via telephone or facsimile on a regular basis and as requested.

The Utilities Branch of a REOC or the SOC is managed by OES. In partnership with OES, CUEA arranges to staff the branch with trained employees from CUEA member utilities. When activated, the Branch performs the following tasks:

- Identify:
  the extent and type of customer and infrastructure damages,
  general geographic location(s) of outages,
  expected duration,
  number of customers affected (by county), and
  resource and information requirements.
- Communicate utility damage information and restoration priorities between government agencies and among utilities.
- Assist with inter-utility response coordination.
- Assist in locating emergency equipment, personnel or material necessary for service restoration.
- Advise utilities of restoration assistance and resources available.

STANDARD EMERGENCY MANAGEMENT SYSTEM (SEMS) SHOWING WATER UTILITY COORDINATION LINKS

SEMS Organizational Levels	Application of SEMS Functions	Utilities' and Special Districts' Coordination Links
STATE LEVEL manages and coordinates state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system. _____ **REGIONAL LEVEL** manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code Section 8600 and between the operational areas and state level. This level, along with state level, coordinates overall state agency support for emergency response activities. _____ **OPERATIONAL AREA LEVEL** manages and/or coordinates resource needs and disaster information within the operational area and serves as the coordination and communication link between the local government level and the regional level. _____ **LOCAL GOVERNMENT LEVEL** manages and coordinates the overall emergency response and recovery activities within the jurisdiction. _____ **FIELD RESPONSE LEVEL** commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.	Multi-agency coordination **SEMS Organizational Functions** Management Operations Planning/Intelligence Logistics Finance/Administration _____ **Organizational Functions (ICS)** Command Operations Planning/Intelligence Logistics Finance/Administration	

EXAMPLE POSITION DESCRIPTIONS AND RESPONSIBILITIES FOR A STANDARDIZED EMERGENCY MANAGEMENT SYSTEM ORGANIZATION

Major Responsibilities of EOC Management Organization

Members of the response staff listed below work closely with the EOC Director. Each of the primary functions can have several sub-functions or units, depending upon the nature and scope of the emergency. Personnel assigned to manage each of the five primary functions are responsible for all sub-functions, unless authority is delegated to unit coordinators. Throughout the organization, a key concept is that functions not specifically assigned to others remain the responsibility of that Section or Unit Chief within that organization level. Example checklists for these positions can be found in the Appendices.

MANAGEMENT

EOC Director or Manager

- The EOC Director provides overall coordination and management direction of EOC operations, and ensures that all required activities within the EOC are activated, staffed, and operating effectively. A Deputy may be assigned if required. All functions in the EOC report to the EOC Director.
- Activation of other SEMS positions will occur as established within EOC activation guidelines and/or as established by the EOC Director.
- The EOC Director has direct responsibility for the command sub-functions of Safety, Liaison, and Public Information. These functions may be assigned to others or retained by the EOC Director.

OPERATIONS

EOC Operations Chief

- The Operations Section Chief is responsible for coordinating all water utility operations in support of the emergency response through implementation of the water utility's action plan.

PLANNING/INTELLIGENCE

EOC Planning/Intelligence Chief

- The Planning/Intelligence Section Chief is responsible for collecting, evaluating, and disseminating information; developing the water utility's action plan in coordination with other functions; and maintaining documentation.

LOGISTICS

EOC Logistics Chief

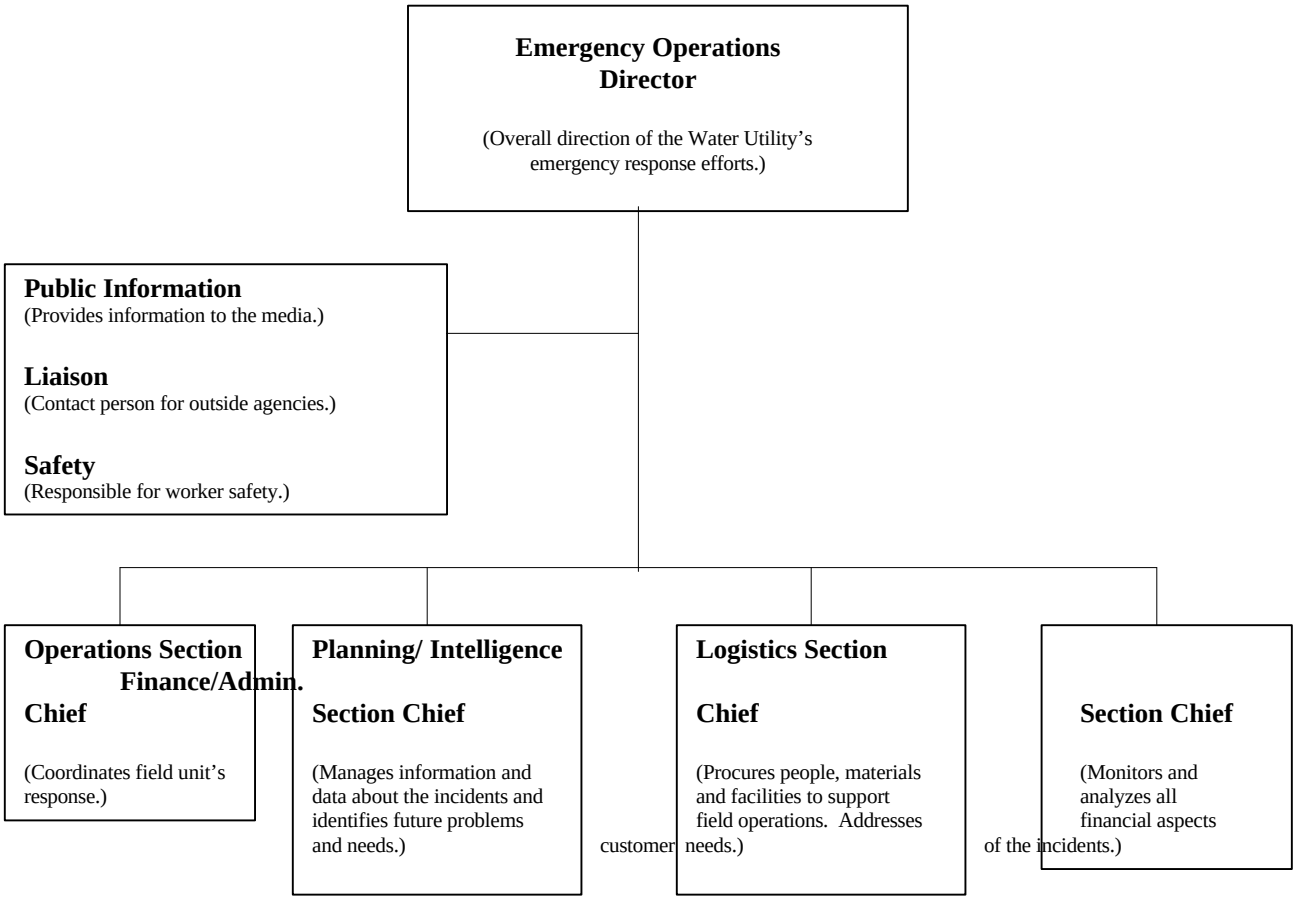
- The Logistics Section Chief is responsible for providing facilities, services, personnel, equipment, and materials.

FINANCE/ADMINISTRATION

EOC Finance/Administration Chief

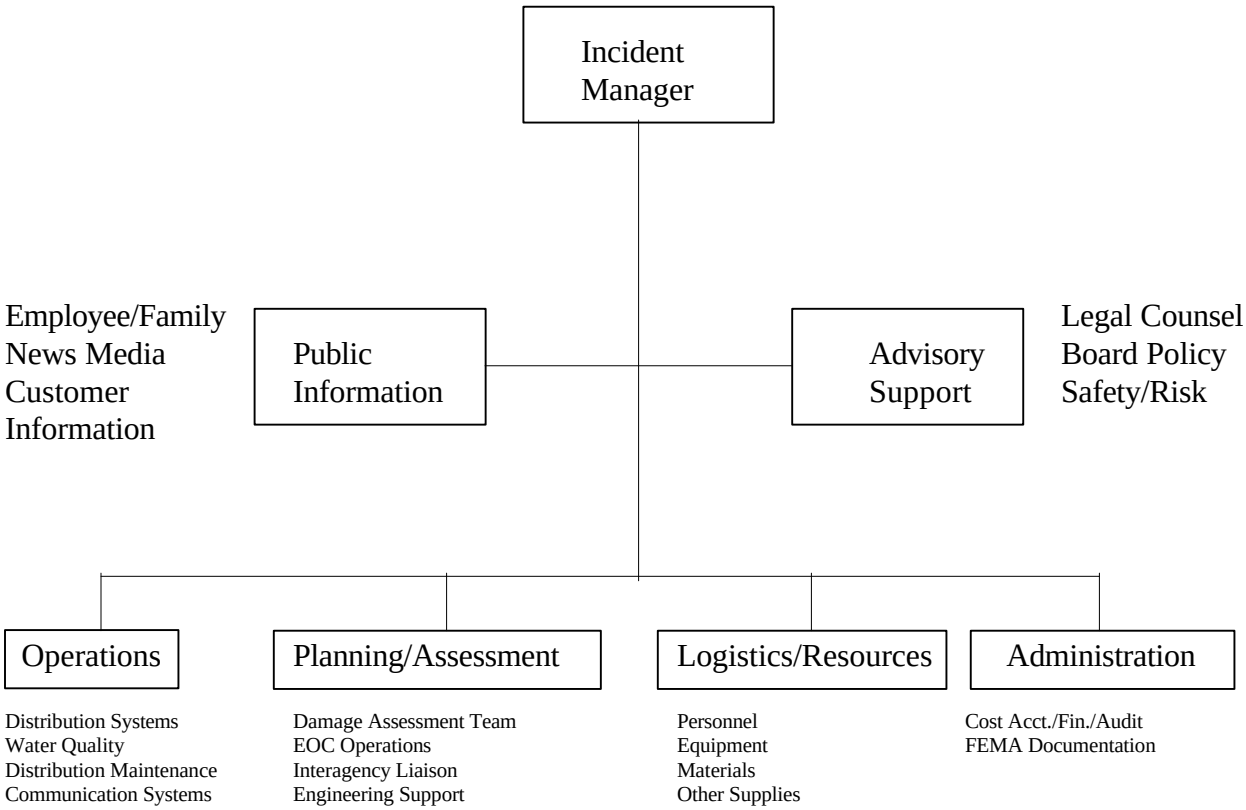
- The Finance/Administration Chief is responsible for financial activities such as tracking and paying invoices and other administrative aspects such as timekeeping.

EXAMPLE OF A LARGE UTILITY UTILIZING A SEMS ORGANIZATION CHART



Response Strategy:	Situation Status:	Support:	Cost and Time:
Field Operations Center		Supply	
Field Operations Center		Employee Care & Support	Compensation/Claims
Field Operations Center	Documentation and Display	Facilities	
Repair Coordination	Geographic Information systems	Services	Treasury
	Computer Support		
Field Operations Center		Customer Support	
Field Operations Center	Technical Support	Telecommunications	
Field Operations Center			
	Engineering Evaluation		
Safety	Seismic Improvement		
	Hydraulics		
Field Operations Center	Water Quality		
	Damage Inspection		

EXAMPLE OF A SMALL UTILITY UTILIZING A SEMS ORGANIZATION CHART



Section Leader Assignments

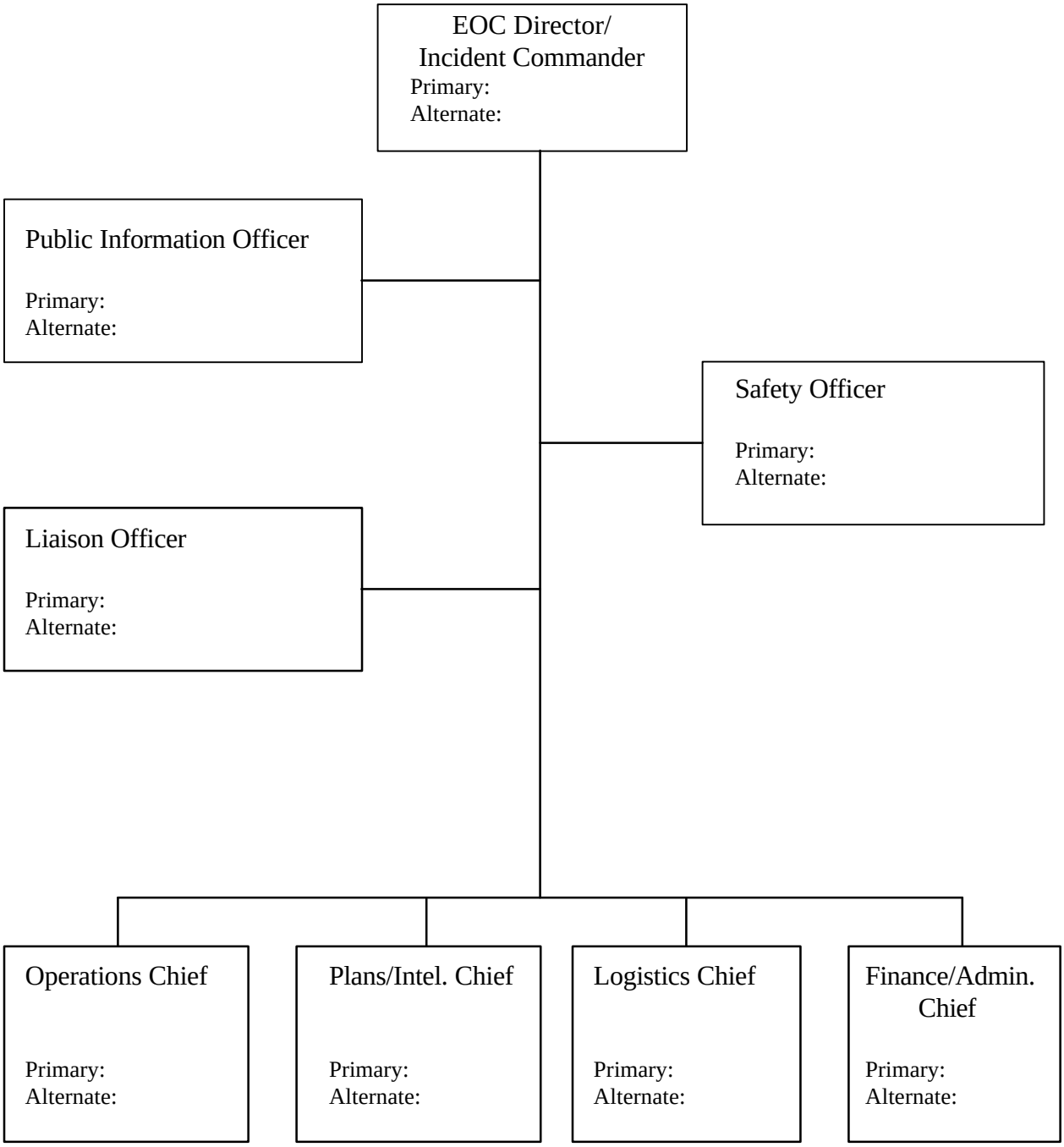
Section	Primary	Alternate
Incident Manager	General Manager	Chief Engineer
Public Information	Pub. Ed. Coordinator	Customer Service Admin.
Advisory Support	Safety Coordinator	Assist. Safety Coordinator
Operations	Water Qual./Dist. Supt.	Field Maint. Superintendent
Planning/Assessment	Head of Eng. Services	Principal Engineer
Logistics/Resources	Asst. Field Maint. Supt.	Field Supervisor
Administration	Administrative Manager	Actg./Personnel Administrator

WORKSHEET FOR SEMS ORGANIZATION POSITION DESCRIPTIONS & RESPONSIBILITIES

SEMS Organization (describe the responsibilities for each position for your organization.)

Functional Position	Responsibilities
EOC Director/Incident Commander	
Public Information Officer	
Safety Officer	
Liaison Officer	
Operations Section Chief	
Planning/Intelligence Section Chief	
Logistics Section Chief	
Finance/Administration Section Chief	

WORKSHEET FOR A SEMS ORGANIZATION CHART



Section 5:
Activation and Notification

ACTIVATION AND NOTIFICATION

Efficient emergency response begins with activation of the plan and notification of response personnel. Most disasters develop from normal emergency response situations. These normal emergencies allow for some warning and notification. Water utility-only emergencies may be obvious, such as a hazardous materials incident, or a warning from the remote monitoring systems, field crews, or customers. Notice of external emergencies will usually be received by a 24-hour answering service. However, in situations like a significant earthquake, the emergency is immediate and personnel should be trained to respond immediately, without waiting for notification. The following information outlines how activation of the plan and notification of personnel occurs.

Automatic Activation vs. Activation with Notification

Although rare in occurrence, certain disaster events would automatically activate the utility's plan. In the following conditions, staff are to respond to their emergency response site immediately:

- Significant earthquake.
- Storm or fire.
- State of War Emergency.
- Site access or egress obstructions occur at utility facilities.

In most events there is a build up or warning time which allows for the following activation procedures. The water utility emergency operations plan may be activated by the appropriate person(s), such as the General Manager, Emergency Operations Director, or designees under several conditions:

- A threatened or actual event affects only water utility facilities and operations (e.g., supply contamination),
- A local area emergency has the potential or has affected all or part of the water utility's service area (e.g., fire), and/or
- A regional event (e.g., moderate earthquake) occurred.

Notification Procedure

Once a disaster has occurred, personnel must be notified to respond. The purpose of this procedure is to facilitate the contact of employees to notify them of a declared emergency, to provide instructions concerning reporting for work, and to ensure that they are notified uniformly. Each water utility should establish a mechanism for contacting each employee (for example, a telephone tree). The flow chart on page 48 shows how a plan may be

activated and the chart on page 49 shows how an employee notification procedure may work. As notifications are made, certain actions should occur:

- Records of messages sent and directives given should be preserved.
- Radio communications should be limited to vital messages only. Radio channels should remain clear until necessary for emergency messages to be sent. Messages should be sent by stating the call sign of the sender and then stating that it is an emergency message. All other transmitters should remain off the air unless requesting clearance to report life threatening situations.
- Liaison personnel should be directed to report to the appropriate emergency operations locations. Communications should be maintained with these locations at least once per day during the emergency.

An example of a notification procedure is on page 50. A worksheet for developing a notification procedure is on page 54.

EMERGENCY STAFFING

The level of response to a disaster or incident affecting a water utility may be dictated by the overall impact, rather than the type of an event. The scope of the disaster or incident, its associated hazards, and area(s) affected at the time the event occurs will determine the level of plan activation and associated response activities.

A water utility must be prepared to respond to various levels of emergency. Such events may be relatively minor incidents or large scale disasters. Some emergencies will be preceded by a build-up or warning period, providing sufficient time to warn the public and implement mitigation measures designed to reduce loss of life, property damage, and effects on the environment. An example is a flood. Other emergencies occur with little or no advance warning, thus requiring immediate activation of the emergency operations plan and efficient and coordinated mobilization and deployment of local resources. An example is an earthquake. All water utility emergency responders must be prepared to respond promptly and effectively to any foreseeable emergency, including sharing resources.

The Standardized Emergency Management System (SEMS) is designed to expand and contract, as necessary, as an incident demands. While the functions within SEMS will remain the same, units within each function can be activated, expanded and contracted, and deactivated as the needs arise, are met, and are no longer needed. The emergency planner and managers must understand how this occurs. While this document does not fully

discuss how SEMS expands and contracts or which units fit within each function, courses about the system are available.

Staff Assignments

It is also important that employees understand what duties they may be assigned in an emergency or disaster, and that they be trained and equipped to fulfill those responsibilities. The plan should designate, at least for major functional responsibilities, the person or staff position to be assigned to these roles. The matrix on page 51 provides an example of how a water utility could staff its EOC. A Worksheet for creating a staffing pattern is provided on page 55.

LEVELS OF RESPONSE

As discussed above, emergencies and disasters require various degrees of response. Not all situations necessitate an all out response by the water utility. The following paragraphs describe when a partial or full response is necessary and some of the activities which must be performed.

Partial Response

The initial response to an emergency involves not only activating the plan and recalling personnel, but doing so at the appropriate level.

- A particular warning or event has occurred, and a water utility emergency may be declared.
- This may involve an emergency where a limited number of responders can handle it, or it might involve the early stages of what could later become a larger problem.
- At the outset of an emergency, or progressive disaster, only a few staff members may be involved. For example, only the emergency operations director, public information officer, legal advisor, and operations or field people would be needed for a small earthquake. But when a large quake hits, more staff are needed. The table on page 51 provides examples of partial or full EOC staffing.
- Disaster response actions include briefing elected officials, sending information to the public through the media, and communicating with other involved agencies.
- Field disaster response actions include securing dangerous areas, evacuation, and damage inspections.

Full Response

During a full response, the following should occur:

- The EOC is opened, and all or most of the positions are filled. This involves a disaster that requires an all-out response effort; for example, a significant earthquake.

EMERGENCY RESPONSE

When the EOC is activated, all identified staff are expected to report for duty during non-work time, or remain on duty and assume their

ACTIVITIES

identified emergency assignment. This includes 24-hour coverage and automatic response under certain conditions.

As on-call water utility staff respond, they are to determine the impact to employees and water utility systems, begin to assess damages, identify who else is needed, and identify what outside agencies need to be contacted. Each person/department assigned to the emergency operations team will respond to the EOC to manage their own personnel and department resources, work with other staff to get outside resources, and begin operations to recover from the emergency. An example of the types of activities that should be performed in an emergency are on page 52.

SUSTAINED OPERATIONS

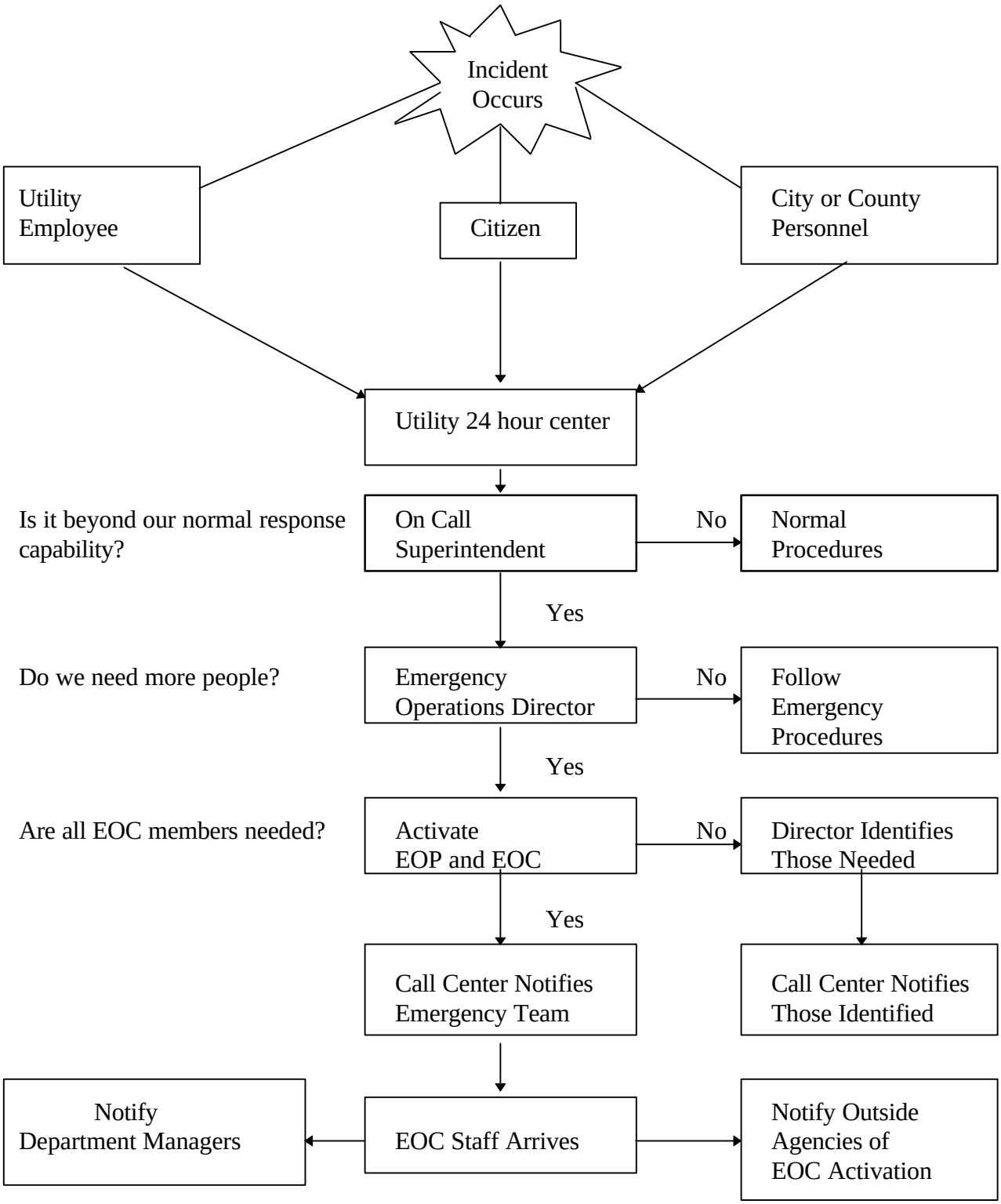
A critical component in responding to a disaster is the ability to sustain operations for an extended period of time. Quite often, water utility employees themselves may be victims, while also being expected to respond and perform disaster-related duties. Many employees may be unable or unwilling to respond to work because of their personal situations. This may require the water utility to have an employee care program in place and/or request mutual aid or assistance to conduct ongoing emergency response activities. Provisions must be made for those who do respond, including both water utility employees and those responding through mutual aid or assistance requests. Support must include shelter, food and water, and personal facilities.

DEACTIVATION AND DEMOBILIZATION

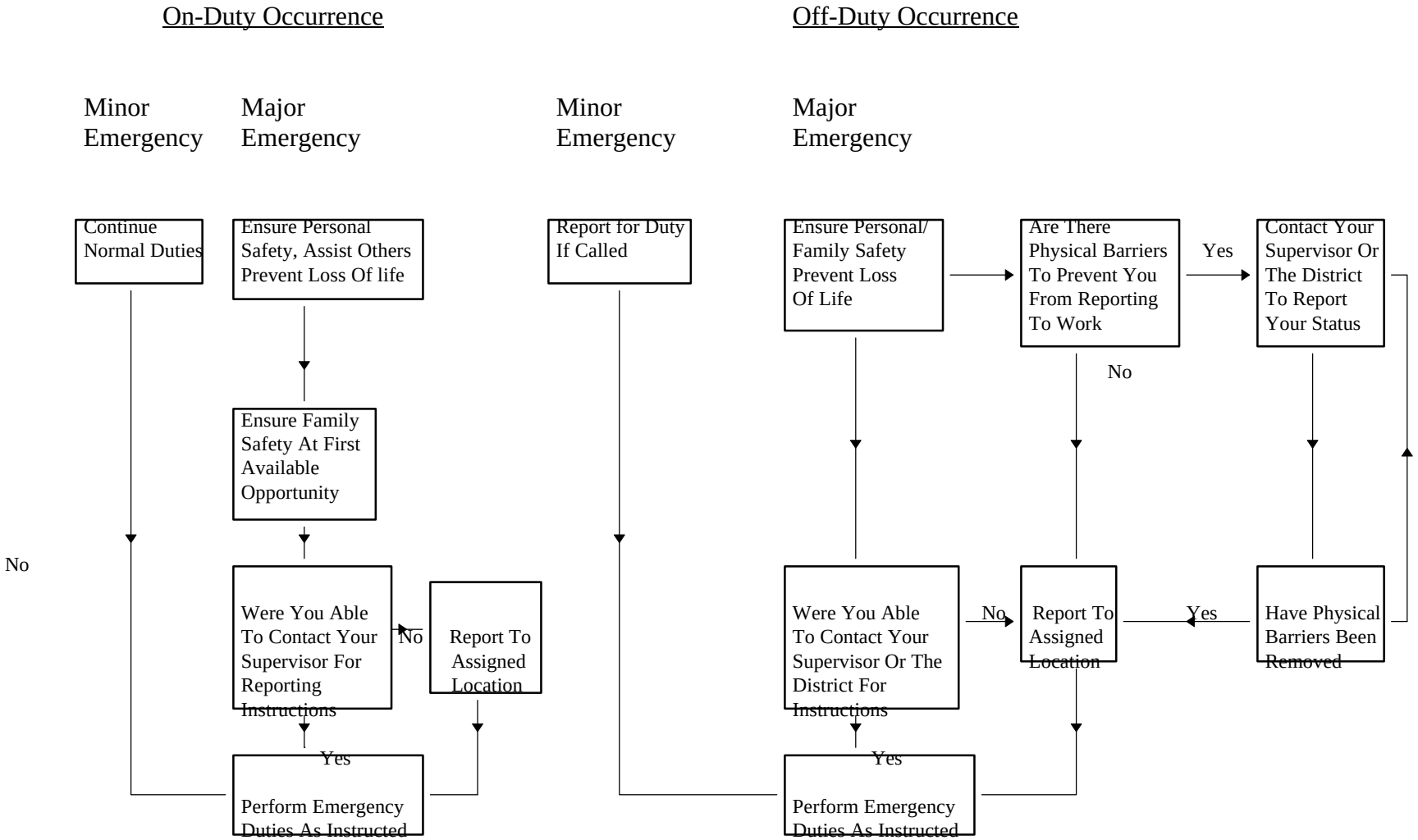
Each plan should include standard operating procedures for demobilizing surplus emergency response personnel and equipment, and deactivating the EOC. The procedures should take into consideration the following:

- No equipment or personnel should leave the incident until authorized by the incident commander or EOC management.
- Resources on any given incident may come from widely scattered locations, and long travel times may be involved. No personnel should be released prior to obtaining a minimum of eight (8) hours rest, unless specifically approved by the Incident Commander, (resources within two hours of the incident command post may be released with Incident Commander approval).
- Crew supervisors will be thoroughly briefed prior to leaving the incident. The briefing will include methods of travel (the Logistics Section will normally arrange for all required transportation of released personnel and equipment), destinations, estimated times of arrival, and transportation arrangements.

EXAMPLE FLOW CHART FOR NOTIFICATION AND ACTIVATION OF THE EMERGENCY OPERATIONS PLAN



EXAMPLE OF AN EMPLOYEE RESPONSE FLOWCHART



EXAMPLE OF A NOTIFICATION PROCEDURE

Should a disaster occur and telephone lines are still operational, each department's designated emergency liaison shall immediately telephone his/her department's manager with any information provided by the emergency operations director or his/her designee. The director shall notify his/her manager(s). They, in turn, will contact their immediate subordinate supervisor(s). The supervisor(s) will telephone his/her first line supervisor(s) with the information and the first line supervisor(s) shall contact their immediate staff.

NOTE: Where there are very large work units, such as in maintenance, it may be necessary for the lines of communication to extend beyond those outlined above, i.e., from supervisor to foremen, etc. Some practical rules include:

- The number of employees to be contacted by any one individual shall be limited to no more than 10.
- If there are more than 10 employees in the work unit, another individual may be designated as a primary contact person and then the number of employees to be contacted divided accordingly.
- The designated contact person may also have a secondary back-up person in case she/he is unable to be reached by telephone.
- A written record of the date and time contacts were attempted or made should be maintained.
- Every effort should be made by the designated contact person to personally contact the employee. If after three attempts the employee still has not been reached, the contact person may leave a message on the employee's recorder or voice mail system, if applicable. Only after the above efforts have been exhausted, and depending on the severity of the emergency, should the contact person leave a message with the emergency contact person provided by the employee.

Each primary contact person is to have readily available an up-to-date home and emergency contact phone number list and, if applicable, the pager number of all employees she/he is responsible to contact.

NOTE: It is each employee's responsibility to ensure that this information is current. The utility may assign an individual to maintain the contact list and update it periodically.

EXAMPLE SEMS STAFFING MATRIX

EOP Position	EQ 5-7MM	EQ >7MM	Fire Watch	Fire Warning	Fire Event	HazMat Internal	HazMat External	Aqueduct Fail/Severe Storm	Natl. Sec/ Civil Unrest
Management: Emergency Ops Dir.	X	X	X	X	X	X	X	X	X
Management Staff:									
• Public Information Officer	X	X	X	X	X	X	X	X	X
• Safety Officer	X				X	X	X	X	X
• Liaison Officer		X		X	X	X	X	X	X
Operations Section Chief	X	X	X	X	X	X	X	X	X
• Response Strategy		X			X	X		X	
• Repair Coordination		X			X	X		X	
Planning/Intelligence Section Chief	X	X		X	X	X	X	X	X
• Situation Status	X	X		X	X	X	X	X	X
• Documentation/Display	X	X		X	X	X	X	X	X
• Technical Support (as needed)									
Logistics Section Chief	X	X		X	X	X	X	X	X
• Support (as needed)		X							
• Services (as needed)		X			X		X	X	
Finance/Administration Section Chief		X			X	X		X	
• Cost/Time		X			X			X	
• Claims		X			X	X		X	

Note: When the Management Staff positions, Operations, Planning/Intelligence, Logistics, or Finance/Administration functions are not staffed, the EOC Director remains responsible for those non-staffed functions.

EXAMPLES OF STAFF RESPONSE

Event	Partial Staff	Full Staff
Earthquake	Some danger (windows and walls with small cracks, some chimneys fell, objects fell from shelves, mains break, etc.)	Injuries and/or building collapses.
Flood	Possible damage to facilities.	Severe damage to facilities.
Fire	Fire Weather Warning or Third Alarm Fire.	Fourth Alarm Mutual Aid or Firestorm.
Civil Unrest	Threatens the safety of staff.	Local Emergency proclamation by local government.
Hazardous Materials Spill/ Leak	Impending evacuation of Water Utility facilities.	Required evacuation or shelter-in-place of persons or homes in area of Water Utility facilities.

EXAMPLE OF ACTIVITIES FOR INITIAL RESPONSE, SUSTAINED OPERATIONS, AND DEACTIVATION

Initial Activities:

- Activate the appropriate level of the emergency plan and the utility's emergency management organization.
- Mobilize emergency response personnel, as needed.
- Activate the Emergency Operations Center, if needed.
- Notify other agencies such as regulatory agencies (local and state health, OES, etc.).
- Begin damage inspections.
- Evaluate safety of facilities.
- Begin documentation process, including photos and video recording.
- Activate emergency communications systems, as needed, and report damage through the SEMS organizational process.
- Activate emergency response measures when necessary, such as:
  - Mutual aid/assistance agreements;
  - Contracts for emergency supplies (including water) and equipment;
  - Obtaining support supplies for recovery personnel (food, water, housing, etc.);
  - Emergency time-keeping methods to record employee hours worked (including overtime and contracts);
  - Inter-agency coordination of resources, including water supplies;
  - Interface with media;
  - Assist employees in personal emergencies (home or work) through the use of Employee Assistance Programs; and
  - Develop repair and restoration plans.
- Establish an emergency action plan within three hours and review every shift change. Work shifts should not exceed twelve hours in duration.

Within 24 Hours:

- Staff the Emergency Operations Center 24-hours a day, in 8-12 hour shifts, as needed.
- Within 8 hours, complete a preliminary damage inspection (see Damage Reporting in Section 8). Identify alternatives for providing temporary services, if necessary, pending full restoration, and locate and arrange for emergency equipment and personnel resources.
- Set up financial object codes to capture FEMA cost allowance information.
- Issue water quality advisories as required by the local health department or State Department of Health Services, Office of Drinking Water.
- Establish restoration priorities and initiate emergency repairs.
- Make external notifications to local governments, regulatory agencies, essential suppliers, major customers, and others as indicated.
- Request mutual aid/assistance resources as warranted by the situation.
- Advise all employees of the situation, work schedules, compensation provisions, and similar matters.

- Review the status of the water utility's personnel and equipment resources and be prepared to respond to requests for mutual aid/assistance.
- Provide public and employee information announcements as indicated.

Within 72 Hours (Sustained Operations):

- Update restoration priorities.
- Reassess the need to make, modify, or rescind water quality advisories in consultation with local and state health authorities.
- Review water utility finances and make adjustments if necessary to meet priority response and recovery needs.
- In conjunction with other local agencies, initiate requests for state and federal disaster assistance, as warranted.
- Continue damage inspection, emergency repairs, public and employee information announcements, and liaison with external agencies.
- Review previous actions.

Deactivation

- Authorize deactivation of field response or EOC sections, branches, or units when they are no longer required.
- Deactivate the EOC and close out logs when the emergency situation no longer requires activation.
- Notify adjacent facilities and other EOCs, as necessary, of planned time for deactivation.
- Ensure that any open actions not yet completed will be taken care of after deactivation.
- Be prepared to provide input to the after action report.

ACTIVATION OF PLAN WORKSHEET

Plan Activation

(clearly state the reason for activation of the plan)

Notification

(describe your notification protocols and develop flow chart and call list)

SEMS STAFFING MATRIX WORKSHEET

EOP Position									
Management: Emergency Ops Dir.									
Management Staff: • Public Information Officer									
• Safety Officer									
• Liaison Officer									
Operations Section Chief									
Planning/Intelligence Section Chief									
• Situation Status									
• Documentation/Display									
• Technical Support (as needed)									
Logistics Section Chief									
• Support (as needed)									
• Services (as needed)									
Finance/Administration Section Chief									
• Cost/Time									
• Claims									

Note: List prioritized hazards that may affect utility service along the top of the matrix. Fill in the matrix for those positions that are appropriate under each hazard. The Management Staff positions listed above remain the responsibility of the Emergency Operations Director unless he/she appoints others to fill the positions.

Section 6:
Action Plans

This section discusses the importance of integrating action plans into field and Emergency Operations Center (EOC) operations. The concept of action planning has been derived from the Incident Command System and is an effective, proven process for organizing response, including establishing response objectives reflecting priorities, supporting activities, and responsibilities for a designated period.

An Action Plan is a plan prepared in the field and the EOC containing the emergency response objectives reflecting overall priorities and supporting activities for a designated period. The plan is shared with supporting agencies. Actual Action Plans may vary and will change over the course of the emergency. The Incident Commander or Emergency Operations Center Director will update the Action Plan as needed.

SEMS ACTION PLANNING

Action Plans are an essential part of all SEMS levels. Action planning is an effective management tool involving two essential items:

- A process to identify objectives, priorities, and assignments related to emergency response or recovery actions; and plans, which document the priorities, objectives, tasks, and personnel assignments associated with meeting the objectives.

- There are two kinds of action plans: Incident Action Plans (IAPs) and EOC Action Plans. Incident Action Plans are prepared in the field at the scene of the emergency. They are focused toward how specific tasks will be accomplished. EOC Action Plans should focus on jurisdictional related issues. The format and content for action plans at the incident and EOC levels will vary. The process for developing action plans is quite similar for all SEMS levels.

Incident Action Plans

Incident Action Plans are required for each operational period and may be either verbal or written.

Written Incident Action Plans are recommended for:

- Multi-agency and multi-jurisdictional incidents;
- Complex incidents; and

- Long term incidents, when operational periods would extend across shift changes.

Special forms are used within ICS to record information for written Incident Action Plans. These forms should be used whenever possible. The format for an Incident Action Plan will generally include the following elements:

- Incident objectives and priorities (overall, what do we want to achieve?);
- Primary and alternative strategies (as appropriate) to achieve incident objectives (what are the ways in which we can achieve the objectives?, how do the strategies compare in safety, speed, environmental impact, cost, etc.?, is current resource availability a limiting or dictating factor in strategy selection?);
- Tactics appropriate to the selected strategy (given a selected strategy, what are the specific tactics necessary to implement the strategy?);
- The type and number of resources to be assigned (determined by the tactics to be used);
- The operations tactical organization necessary for the selected strategy and tactics (can include describing the incident geographically or functionally);
- Overall support organization, including logistical, planning/intelligence, and finance/administration functions;
- A communications plan;
- Safety messages; and
- Other supporting documentation needed, such as an incident map showing access to key facilities, or a medical support plan.

EOC Action Plans

Action planning at all EOC levels, like that of the field level, is based around an operational period. The length of the operational period for the EOC is determined by first establishing a set of objectives and priority actions that need to be performed and then establishing a reasonable time frame for accomplishing those actions. Generally, the actions requiring the longest time period will define the length of the operational period.

Typically, operational periods at the beginning of an emergency are short, sometimes only a few hours. As the emergency progresses, operational periods may be longer, but should not exceed twenty-four hours. Operational periods should not be confused with staffing patterns or shift change periods. They may be the same, but need not be.

The initial EOC Action Plan may be a verbal plan developed in the first hour after EOC activation. It is usually completed by the EOC Director in

concert with the General Staff. Once the EOC is fully activated, EOC Action Plans should be written.

EOC action plans should not be complex or create a time-consuming process. The format may vary somewhat within the different SEMS levels, but the EOC action plan should generally cover the following elements:

- Listing of objectives to be accomplished (should be measurable);
- Statement of current priorities related to objectives;
- Statement of strategy to achieve the objectives (identify if there is more than one way to accomplish the objective, and which way is preferred);
- Assignments and actions necessary to implement the strategy;
- Operational period designation (the time frame necessary to accomplish the actions);
- Organizational elements to be activated to support the assignments (also, later Action Plans may list organizational elements that will be deactivated during or at the end of the period); and
- Logistical or other technical support required.

The primary focus of the EOC Action Plan should be on water utility issues. The plan sets overall objectives for the water utility and may establish the priorities as determined by the EOC Director. It can also include mission assignments to departments, provide policy and cost constraints, inter-agency considerations, and other information. Properly prepared, the EOC Action Plan provides essential information needed to develop departmental Action Plans.

The Action Planning Process (EOC and Incident)

The primary responsibility for preparing an incident or an EOC Action Plan is assigned to the Planning/Intelligence Section. Several elements of the organization will be involved in the development of the content for the plan:

- The Incident Commander or EOC Director and all members of the General Staff must participate in the process.
- There must be adequate representation of key organizational components, organizations, and agencies.
- Representatives participating in the planning process must have the technical expertise and authority to commit to accomplishing the objectives.
- Representatives must understand the action planning process and be willing to follow the process.
- There must be adequate logistical arrangements and facilities to support the process.
- There must be adequate pre-event planning, and participants must adhere to the format and timetables related to the planning process.

Steps in the Planning Process (EOC and Incident):

1. Identify representatives and organizational entities needed for current planning. This will include, but is not limited to, the Incident Commander or EOC Director, General Staff, Information, and Liaison functions, as well as key agency representatives essential to meeting the objectives.
2. Establish a cycle for action planning meetings. Initially, these may be every few hours or several times a day. Over time, they will move to twice a day and then to daily.
3. Develop a format for the plan, and use it in the planning process. Formats will vary depending upon Field or EOC level, complexity of the plan, and other factors.
4. Determine who needs the plan and establish procedures for publication and distribution. Establish a procedure for revisions and updates. This could include providing suggested written revisions, or provision for making appropriate changes during the operational period, if required.
5. Prepare and distribute the Action Plan. The plan will be prepared based on information obtained at the planning meeting. Ensure that the plan is approved by the Incident Commander or the EOC Director prior to distribution.
6. Establish a documentation file for Incident or EOC Action Plans. This file will contain the Action Plans and any supporting documentation.

Establishing Priorities

Action plans are based on establishing priorities of actions to be undertaken. It is important to remember that priorities may change as circumstances dictate. The following items illustrate the types of actions that should be a priority for water utilities:

- Act to protect life. If the disaster has created a severe water supply emergency that results in a threat to public health, follow the criteria established by the Department of Health Services, Office of Drinking Water for authorization to use alternative supplies. If the alternative supplies do not meet primary drinking water standards, issue a Boil Water Order or Unsafe Water Alert. Examples of a Boil Water Order and Boil Water Order Press Release can be found in the Appendices.
- Preserve water in storage to the extent possible. Lower water levels in reservoirs to reduce the possibility of structural failure if damage is apparent. Assess damage to the sewer system to determine if it may contaminate water supplies.
- Isolate areas that will take the longest to restore to service and work with local government to provide alternate water supplies. The Office of Emergency Services has developed a guidance document entitled *Multi-Agency Emergency Response Procedures for Potable Water*

Procurement and Distribution to assist water utilities and local governments in meeting the requirement to provide water to the public.

- Set priorities on repair work. Plan to restore service area by area. Get input from the emergency operations center on essential uses. Consider feeder lines. Keep in mind the need for firefighting water. Request mutual aid/assistance if the needed repairs exceed the utility's ability to complete repairs in a timely manner.
- List agencies with critical needs such as hospitals, convalescent homes, and hospices.

EXAMPLE OF AN EOC ACTION PLAN

DISASTER NAME: El Nino 1998	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: 2/3/98 Hrs: 0800 To: 2/4/98	PLAN REVIEWED BY: Planning/Intelligence Chief: Cauley PLAN APPROVED BY: EOC Director: Kaiser

MAJOR INCIDENTS/EVENTS IN PROGRESS: Eleven inches of rain fell in the last three days saturating the ground. Rain has become immediate runoff and created local flooding conditions and flash flood warnings. High wind and heavy rain forecasts predicted by the National Weather Service to continue over next 72 hours. Seven more inches are expected to fall.

1. High winds, falling trees creating unsafe employee conditions. Three reservoir sites with tall eucalyptus. Need decision on cutting down trees.
2. Landslide on water utility property above elementary school. Eaton reservoir above Miles Elementary. Need decision on what to broadcast to media and how to coordinate response with the school district.
3. Total of 22 independent landslides; four affecting 12 inch service mains. See attached landslide chart for each location. Prioritize decision on which landslide to respond to, and provide direction on alternative water source, if peril increases on service main.
4. High tides will impact levees supporting the aqueduct; if levee fails entire water source will flood. Bates Slough and Rankin-Kaiser Tract. Coordinate activity with US Bureau of Reclamation; locate additional sand and sandbags, and crews to assist with sandbagging operations.

Overall EOC Objectives:

1. Protect and save lives
2. Protect and save the environment
3. Preserve water service

DISASTER NAME: El Nino 1998	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: 2/3/98 Hrs: 0800 To: 2/4/98	PLAN REVIEWED BY: Planning/Intelligence Chief: Cauley PLAN APPROVED BY: EOC Director: Kaiser

Management Objectives:

1. Ensure employee and public safety.
2. Notify Board of Directors of conditions.
3. Consult legal staff on declaration of an emergency.
4. Inform media of potential harm and what is being done to respond.
5. Notify DHS of potential aqueduct failure and water supply contamination.

Operations Objectives:

1. Post warnings to avoid facilities with tall trees. Cut eucalyptus trees that are endangering people or facilities.
2. Monitor landslide above Miles Elementary and position front loaders in area. Identify emergency crews for night shift.
3. Identify sandbagging crews. Conduct expedient training with DWR materials.
4. Locate above ground water hoses for emergency main bypass.

Logistics Objectives:

1. Locate emergency food and water for employees.
2. Identify additional staff (other than field crews) that can be available to perform emergency work.
3. Locate sand, bags, and equipment for sandbagging.
4. Activate emergency contracts with vendors as needed.
5. Locate night lighting equipment for levee landslide watch.

Planning/Intelligence Objectives:

1. Monitor weather reports.
2. Monitor reports on landslides.
3. Track information on situation status board and on map.
4. Track availability of resources.

DISASTER NAME: El Nino 1998	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: 2/3/98 Hrs: 0800 To: 2/4/98	PLAN REVIEWED BY: Planning/Intelligence Chief: Cauley PLAN APPROVED BY: EOC Director: Kaiser

Finance/Administration Objectives:

1. Implement emergency job number procedures.
2. Track costs associated to response to any one of the events.
3. Debrief crews upon return, on actions taken at each job site and record information.
4. Prepare initial damage survey reports to forward to local OES.

State Agency Liaison in the EOC
Agency SEMS Functional Assignment:

Current Organization Roster:

Emergency Operations Director:			
Primary:	Kaiser	Alternate:	Eaton
Public Information:			
Primary:	Rankin	Alternate:	Bates
Liaison Officer:			
Primary:	Riordan	Alternate:	Valenica
Safety Officer:			
Primary:	Pinegar	Alternate:	Hernandez
Operations Chief:			
Primary:	Faria	Alternate:	Miles
Planning/Intelligence Chief:			
Primary:	Cauley	Alternate:	Nottingham
Logistics:			
Primary:	Yates	Alternate:	McDonnell
Finance/Administration:			
Primary:	Newman	Alternate:	Latipow

Attachments:

List of Landslides
Flood Plain Map
Plot map of landslides
Organizational Chart

EOC ACTION PLAN WORKSHEET

(Water Utility Name)
EOC ACTION PLAN

DISASTER NAME:	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: Hrs: To:	PLAN REVIEWED BY: PLAN APPROVED BY:

MAJOR INCIDENTS/EVENTS IN PROGRESS:
(Refer to current Situation Report)

Situation: (Type of Incident or Event)	Location: (Operational Area, City, Landmark)	EOC Support Requested: (Yes or No)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Overall EOC Objectives:

DISASTER NAME:	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: Hrs: To:	PLAN REVIEWED BY: PLAN APPROVED BY:
Management Objectives:	
Operations Objectives:	
Logistics Objectives:	
Planning/Intelligence Objectives:	

DISASTER NAME:	
CURRENT OPERATIONAL PERIOD: (Enter Date and Time) From: Hrs: To:	PLAN REVIEWED BY: PLAN APPROVED BY:
Finance/Administration Objectives:	
State Agency Liaison in the EOC: Agency: SEMS Functional Assignment:	
Current Organization Roster: <u>Emergency Operations Director:</u> Primary: Alternate: <u>Public Information:</u> Primary: Alternate: <u>Liaison Officer:</u> Primary: Alternate: <u>Safety Officer:</u> Primary: Alternate: <u>Operations Chief:</u> Primary: Alternate: <u>Planning/Intelligence Chief:</u> Primary: Alternate: <u>Logistics:</u> Primary: Alternate: <u>Finance/Administration:</u> Primary: Alternate:	

Attachments:

Section 7:
Emergency Operations Center

An Emergency Operations Center (EOC) is a location from which centralized emergency management can be performed. This section describes the importance of EOCs to a successful, well-coordinated emergency response. The essential functions needed in an EOC are described below:

- Functions of Management, Operations, Planning/Intelligence, Logistics, Finance/Administration, and related sub-functions.
- Setting priorities and developing Action Plans.
- Coordination and support of all field-level incident activities within the utility service area.
- Information gathering, processing, and reporting within the utility service area and to higher levels within SEMS.
- Coordination with Local Government, Operational Areas, or Regional EOCs, as appropriate.

LOCATION

A water utility should identify a primary and alternate EOC. The EOC should be a large office, conference room, trailer, or other suitable location. The primary and alternate EOCs should not be in the same location (i.e. in the same building) because they could both suffer damage from the effects of the same hazard. They must be located outside a flood zone or be located on ground which will not flood. They should also be located, if possible, outside of a seismic area or be made as earthquake safe as practical. The locations should also be evaluated for man-made hazards such as storage of hazardous materials. The location of the primary and alternate EOCs should be reviewed periodically to ensure that the locations remain in relatively safe areas.

FUNCTIONAL REQUIREMENTS

To function adequately during an emergency, the EOC must be large enough to accommodate the water utility emergency response staff. It is critical that the EOC be located in a secure area and be stocked with essential support equipment. The EOC should meet the following requirements:

- Adequately protected from the effects of known hazards.
- Large enough to accommodate the staff necessary for any emergency (FEMA recommends 50 sq. ft. per person.).

- Suitable to occupy during severe weather conditions.
- Equipped with pre-designated displays and other support equipment.
- Capable of immediate occupancy.
- Equipped with primary and backup communications systems to communicate with field incident personnel and with other Local Government and Operational Area EOCs.
- Supplied with adequate alternate power.

An example of an EOC layout is provided on page 69. An example list of essential EOC support equipment is provided on page 70 and a worksheet for the same is on page 73.

EXAMPLE OF AN EOC LAYOUT

EOC Location: _____

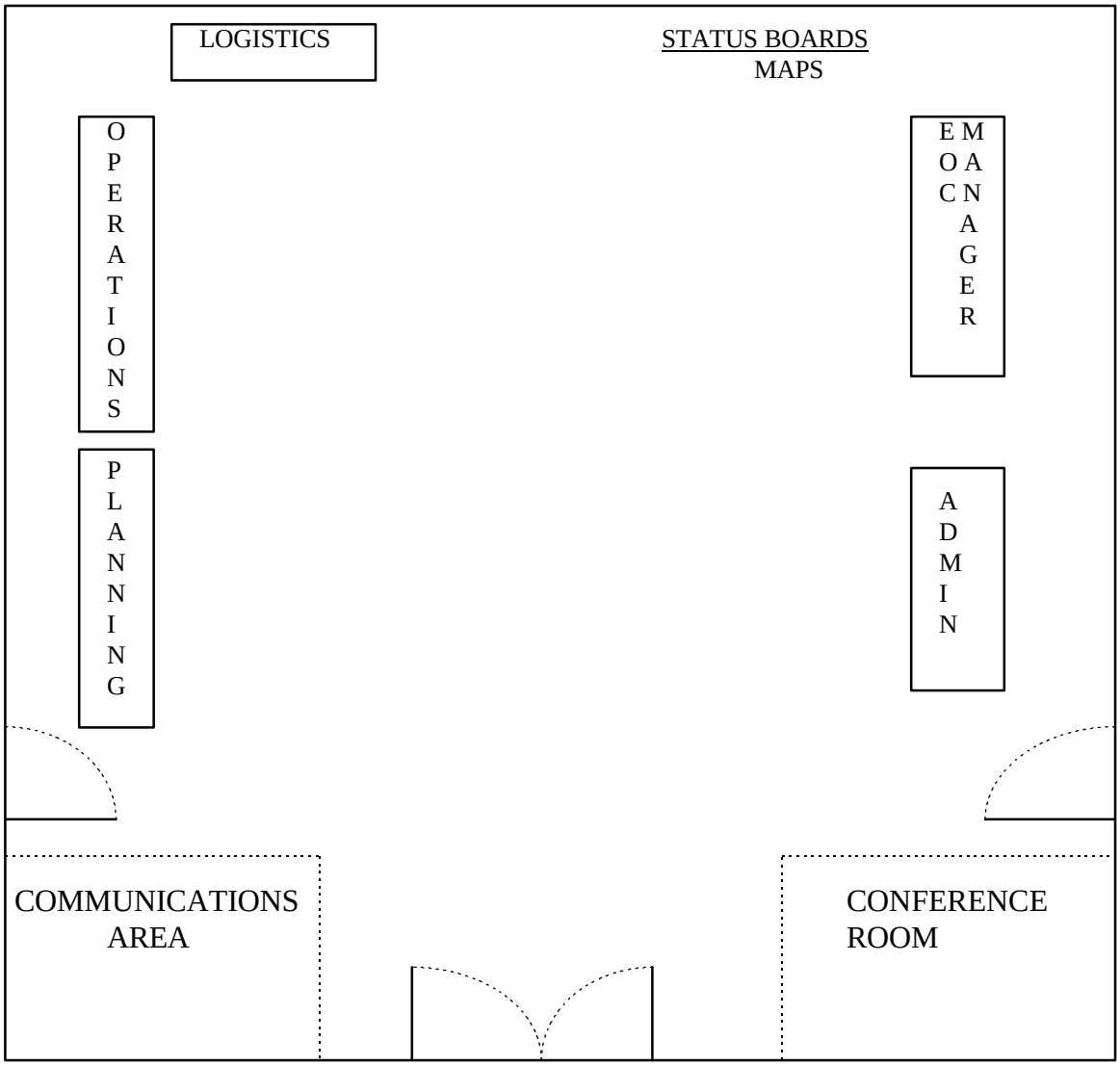
EOC Address: _____

EOC Communication Numbers:

Radio: _____

Telephone: _____

Fax: _____



EXAMPLE LIST OF ESSENTIAL EOC SUPPORT EQUIPMENT

This is a partial list of the types of items typically used in an EOC.

Communications Equipment	Qty	Date	Date Ordered
AM/FM Radio (battery operated)*	___	____	_____
Two or more TV monitors with remote control*	___	____	_____
Manual Radio*	___	____	_____
Frequency Scanner (labeled with local frequencies)*	___	____	_____
Base Radio*	___	____	_____
Two Facsimile Machines (incoming and outgoing)	___	____	_____
Spare/cellular telephone*	___	____	_____
Office Equipment			
Blank White Boards	___	____	_____
Calculator	___	____	_____
Clock*	___	____	_____
Computer printer	___	____	_____
Desktop computer/disks	___	____	_____
Laptop computer*/disks	___	____	_____
Office Supplies - (Separate list)	___	____	_____
Tables/chairs for all assigned personnel	___	____	_____
Tape Recorder*	___	____	_____
Overhead Projector and Screen for Projector	___	____	_____
Typewriter	___	____	_____
Resource Documents			
Emergency Plan	___	____	_____
Service Area Wall Map (mounted)	___	____	_____
Regional Wall Map (mounted)	___	____	_____
Resources Listings - Contact Lists	___	____	_____
Procedures and Checklists	___	____	_____
Sign-in Roster	___	____	_____
Status Boards for:			
Critical Facilities	___	____	_____
Personnel	___	____	_____
Major Incidents in Progress	___	____	_____
EOC Organization (wall mounted)	___	____	_____
Emergency numbers/special notices	___	____	_____
Telephone Directories	___	____	_____
Thomas Bros. Map Guides for CSA	___	____	_____
Safety Equipment			
Fire Extinguisher	___	____	_____
First Aid Kit	___	____	_____
Flashlights*	___	____	_____
Internal PA system (if large area)	___	____	_____
Emergency Generator	___	____	_____
Auxiliary Lighting Unit	___	____	_____

Other	Qty	Date	Date Ordered
Cameras*			
Still	___	____	_____
Video	___	____	_____
Digital	___	____	_____
Pay Phone Change	___	____	_____
Cots and Blankets	___	____	_____
Food	___	____	_____
Water	___	____	_____
Personal Hygiene Products	___	____	_____

* Have extra batteries and/or chargers on site and change batteries annually.

EMERGENCY OPERATIONS CENTER WORKSHEET

Emergency Operations Center (EOC)

The (Water Utility) EOC is the location from which centralized emergency management will be performed. The (Water Utility) EOC provides the following essential services:

Location

The (Water Utility) has designated two sites for its EOC. The primary location is (Identify primary location of EOC.). The location of the alternate EOC is (Identify alternative EOC location.).

Note: The alternate EOC should not be in the same location (i.e. in the same building or immediate location) as the primary EOC because they could both suffer damage from the effects of the same hazard. Written directions and maps for traveling to the primary and alternate EOCs should be available to all employees.

EOC SUPPORT EQUIPMENT WORKSHEET

Communications Equipment	Qty	Date	Date Ordered
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
Office Equipment			
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
Resource Documents			
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
Safety Equipment			
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
Other			
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____
	___	____	_____

Section 8:
Information Management

INFORMATION MANAGEMENT

This section describes the information management process with an emphasis on documentation (written and photographic), especially for damage inspection and reporting. Over the last decade, one of the most significant lessons learned from emergencies is the critical role that information management plays before, during, and after emergencies. Good management facilitates timely and accurate collection of information, efficient response to needs, and recovery from a disaster (including financial assistance for response, recovery, and mitigation costs).

Documentation

Documentation should be started in the early stages of an emergency. Although it may be tempting to forgo documentation during the emergency response, adequate documentation:

- Is essential to operational decision-making;
- May have future legal ramifications; and
- May have implications for reimbursement eligibility.

Depending upon the situation, different types of documentation provide the source documents or database for the After Action Report. Documentation should not be restricted to reports or forms used exclusively by the planning function, but should include materials from the entire emergency organization. Ideally, key components of this database, such as time-keeping procedures, should be identified as part of pre-incident planning. They should then be used during an actual event.

There are many types of documentation. Some recommended types include:

- Action Plans developed to support operational period activities;
- Forms used in Incident Command Systems or Emergency Operation Centers;
- Activity logs and journals;
- Written messages;
- Situation reports;
- Function and position checklists;
- Public information and media reports;
- FEMA developed forms; and
- Other forms or information.

Data Gathering Methods

There are other methods for gathering information. These include:

- Exit interview or critique forms distributed and completed as personnel rotate out of a function.
- Critiques performed at various time frames after an operation. Some critiques may be conducted immediately after an event and may be fairly informal in approach.

Damage Inspection and Reporting

During an emergency, there are several ways damage information is reported to the EOC.

- Information from employees assigned to conduct damage inspections of specific facilities, systems, and other areas;
- Customers reporting system damage to the utility telephone or radio operators and customer service representatives at the business offices;
- Radio and TV reports; and
- Communications with other local government agencies.

Water utility employees who receive damage information should use a pre-designed form to document the information. An example of a Damage Reporting procedure is on page 77. A Worksheet for a utility to record damage is on page 79. A Worksheet for reporting damage to other agencies is found on page 80.

The following areas of damage inspection should be reviewed annually:

- staffing
- facilities
- inspection criteria
- reporting process
- phone numbers

Communication Systems

This section discusses the flow of information through all levels of the system during the event. It should look at procedures, hardware, training, personnel, and adequacy and appropriateness of resources.

This section should also discuss communicating with quasi-governmental, volunteer agencies, and private sector responders to the incident. This would include various types of utility companies, private water utilities, and special services districts.

Personnel in EOCs must have adequate communications that will function at the time of an emergency. Backup communications must be provided for all critical communication links. These would include:

- Field units at incident locations

- Field superintendents
- Local Government EOC(s)
- Adjacent utilities
- Operational Area EOCs

Communications systems will include some or all of the following:

- Commercial telephone (the EOC should have a minimum of 8 lines available for use);
- Cellular telephones;
- Base radio and radio frequency scanner set to local jurisdiction, fire, police, medical services frequencies, and the National Weather Service;
- Pay telephones; and
- Amateur radio (as appropriate). For coordination with amateur radio, contact the local emergency services office to get information about the Radio Amateur Civil Emergency Services (RACES) program. Additional information about communications systems developed by water utilities for use during emergencies can be found in Section 10.

Example of a Damage Reporting Procedure/Initial Checklist

Water utility employees assigned to conduct damage inspection of facilities as detailed in the attached plans, are to use the checklists/tables, etc., in the Plan to record any observed damage. Provide this information to the Emergency Operations Center damage staff as soon as practical. If the damage is severe enough to endanger employees, the public, property, or the operation of the facility, use the fastest method to relay the information to the EOC.

Inspected facilities will be tagged to alert other water utility personnel that a preliminary assessment has been conducted and a damage report has been forwarded to the EOC. It will be the field coordinator's responsibility to collect the damage information as it is reported and transmit it to the EOC.

Conduct Preliminary Damage Inspection

- ÿ Determine need to repair, replace, or abandon facility.
- ÿ Include estimate of cost to restore facility.
- ÿ Consider possible effects of aftershocks (if event is an earthquake).
- ÿ Evacuate buildings in danger of collapse.
- ÿ Confirm that field crews perform the following inspections and close/tag damaged facilities and equipment:

- Reservoirs

- ÿ Check for seepage, leaks, cracks, landslides, embankment slump, broken inlet-outlet pipes, piezometers, and underdrains.
- ÿ Notify Department of Water Resources, Division of Safety of Dams (through water utility EOC) if problems are found.
- ÿ Lower water levels to reduce possibility of structural failure.

- Wells

- ÿ Check for power disconnect.
- ÿ Test for contamination.
- ÿ Check for failure of pump or motor.
- ÿ Check for physical damage.

- Treatment Plants

- ÿ Check for available power and condition of mechanical and electrical equipment.
- ÿ Check quality of outflow.
- ÿ Check for chemical releases.
- ÿ Check for the need for emergency purification.

ÿ Check for structural damage.

- Tanks

ÿ Check for evidence of failure of subbase.
ÿ Check for leaks, cracks, broken inlet-outlet pipes, and underdrains.
ÿ Check for buckling.

- Pumping and Generating Plants

ÿ Check transformers for damage and test capacity.
ÿ If generators are water-cooled, check for adequate water storage and provide make-up water.
ÿ Check suction and discharge lines for cracks and broken connections.
ÿ Check for power disconnect.
ÿ Check for structural damage.

- Pipes

ÿ Check air and vacuum valves.
ÿ Check for leaks, breaks, pressure loss in lines, cross-connections between water and sewage lines, and overflow into streets and watercourses.
ÿ Check mechanical couplings.

WATER UTILITY DAMAGE REPORT WORKSHEET

Water Utility: _____ Date/Time: _____

General Manager: _____ Phone Number: _____

Contact Person: _____ Phone Number: _____

Fax Number: _____ Field Office Phone No.: _____

City or Area Served: _____ Population: _____

Number of Service Connections: _____ Percent of System Damaged: _____

Approximate Number of People Without Water: _____

Emergency Staging Area: _____

Primary Water System Damage

	Check Appropriate Damage Categories			
Facility	**None**	**Minor**	**Major**	**Severe or Out of Service**
Supply				
Transmission				
Storage				
Pumping Stations				
Distribution System				
Treatment Systems				
Headquarters/Field Office				
Other				

Types and Description of Problems (prioritize problems beginning with most severe): _____

_____

_____

Location of Outage (pressure zone): _____

Duration of Outage: _____

Resources Requested (note: immediate or delayed need):

Material: _____

Equipment: _____

Personnel: _____

Other Emergency Coordination Needs (Law Enforcement, Fire, Health, etc.): _____

_____

Potable Water Needs: _____

Form Completed By: _____

DAMAGE REPORT TO EXTERNAL AGENCIES WORKSHEET

DAMAGE REPORT TO EXTERNAL AGENCIES

Date: _____ Time: _____

Plant/Facility Name: _____

Location: _____ Gradient: _____

Person Making Report: _____

Distribution of Report: (Primary) _____ Copy To:_____

Initial Report: _____ Follow-Up Report: _____

1. Power: Yes ___ No ___ If no Internal (ours) ___ External (power company) ___
Note: IF POWER IS OFF TURN OFF MAIN BREAKER

2. Electric Panel Damaged: Yes ___ No ___ Describe Damage _____
_____
Main Circuit Breaker Tripped: Yes ___ No ___
Number of Sub-Breakers Tripped: Yes ___ No ___ List Units:
_____
_____

3. Wells out of Service: (other than power problem) No. ____ Total GPM _____

Reason: Motor ___ Pump ___ Well ___ List Units
_____
_____

4. Pumps out of Service: (other than power problem) No. ___ Total GPM _____

Reason: Motor ___ Pump ___ Inlet Piping ___ Outlet Piping ___ Regulator ___

List Units: _____

5. Interconnections out of Service: (other than power problem) No. ___ Total CFS _____

Reason: Motor ___ Pump ___ Inlet Piping ___ Outlet Piping ___ Regulator ___
List Units: _____

6. Available Useable Storage: Elevated Amount _____ Other _____

7. Lost Storage: Elevated Amount _____ Other _____
List Facilities and Damage:
_____

8. Treatment Facilities Operational: Yes ___ No ___ NA ___
If no, list Facilities and Damage: _____

9. Additional Comments

_____

_____

Section 9:
Employee Care and Support

This section provides water utility emergency planners with information on employee care and support for the work place and employee and family care and support outside the work environment. It also identifies some of the policies and services put in place by employers. Water utility officers and employees should be familiar with the utilities' emergency policies and procedures. During the response to and recovery from a disaster, many utilities have prepared to care for and support the needs of their employees on the job while they work extended hours and many days in a row; often for weeks or even months at a time. Equally important as employee care and support at work is employee and family care and support at home. Emergency response plans primarily focus on the resumption of business operations rather than employee problems caused by a disaster such as the 1994 Northridge Earthquake or the East Bay Hills Fire Storm. Both of these disasters had a significant impact on employee care and support systems at home and the work place.

Following the 1994 Northridge Earthquake it quickly became apparent that employers would have to take a role in solving non-work related employee problems if their employees were to return to work in a timely manner. Hundreds of public and private entities, on an ad-hoc basis, began the process of developing emergency policies and procedures to deal with the needs of employees impacted by the disaster.

This was a unique undertaking since emergency plans typically do not consider the needs of employees outside the work environment. However, in this scenario it was a benefit to the employers as well as the employees to work together to solve their mutual problems.

Some of the policies and services put in place by employers include the following:

- 24-hour employee assistance hotlines and help desks were established which were staffed by volunteers.
- Flexible work schedules were established for impacted employees.
- Alternate work options such as telecommuting were established.
- Salary advances were made available.
- Emergency leave banks were established for employees with no leave.

- Emergency paid leave was granted to impacted employees.
- Advance leave with optional pay-back provisions was granted.
- Credit union loan payments were deferred for up to 90 days.
- Low interest loans were provided by credit unions.
- Over-the-counter cash withdrawal amounts were increased.
- Check-cashing services were provided by employers.
- Licensed child care and pet care referral services were developed.
- Rideshare subsidies were increased for commuters using public transportation.
- Relocation and moving assistance were provided.
- Moving vans and boxes were provided.
- Unoccupied apartments and houses were offered to employees whose homes were damaged or destroyed.
- Storage facilities were provided for employees whose homes were destroyed.
- Counseling services were obtained.
- Collection centers were established to handle the distribution of blankets, food, clothing, and other essentials.
- Volunteer lists were established to assist impacted employees with clean-up work and home repair.
- Engineering services were provided to assist employees in determining the cost and extent of earthquake damage.
- FEMA information, along with fact sheets and forms, were obtained so employees could properly file claims with the appropriate authorities.
- Emergency message centers with an 800 number were established.

The responsibility for activating and operating business emergency plans, and the systems designed to deal with non-work related employee problems, should be clearly understood. It is important for employees to be familiar with company policies and practices that deal with business resumption issues as well as employee problems that have resulted from a disaster.

Another unfortunate reality of many major emergencies is the loss of life or the injury of people. The water utility employee is not immune. It is important to plan for emergency situations, such as an earthquake or firestorm, because they occur rapidly and often cause massive damage. Even with the best safety procedures and equipment available, the potential exists for a water utility employee to be seriously injured or even killed. The utility's emergency plan should include information about how to contact emergency rescue and medical personnel and local hospitals phone numbers and locations. Field response manuals should also contain this information for every location where staff may be assigned to work.

If an employee is seriously injured or dies during an emergency, a number of actions must be taken as quickly as possible. Under most conditions, other employees will be working in the same area or site. Depending on the level of the emergency, lines of communication could be down, streets blocked, large numbers of people could be hurt, and general chaos could prevail throughout the area. Although employees must remain calm, emotions in these kinds of situations run high, people are stressed from the event, and those not prepared to cope are most upset.

The following procedures provide a general guideline to be followed. The most important factor, however, is good judgment and decisions by the employees on site.

SERIOUS INJURY

In case of injury, immediately render aid, call 911 for emergency help, and take all actions necessary to assist the injured employee. Take care of the employee first! Water utility staff will accompany any evacuated employee.

With the injured employee receiving assistance, the senior employee present needs to notify Employee Care & Support (EC&S) staff. The injured employee's supervisor must also be notified as soon as possible. Important information to be relayed is:

- Name of employee;
- Employee's general condition (conscious, ambulatory, etc.);
- Employee number if known (found on the employee ID Card which all employees should carry during working hours);
- Employee's occupation (identifies employee accurately along with number);
- Nature of injury;
- Location where injury occurred;
- Time of injury;
- Hospital or other treatment facility to which employee was evacuated and mode of transportation;
- Names of other workers on site and their condition; and
- Name of individual providing report.

Once notification of the injury is received by the Employee Care & Support Unit, a decision on notifying the employee's family will be made in consultation with the EOC Director. The location of the injured employee will be confirmed and a co-worker who volunteers or a member of the employee's supervisory chain, along with a member of EC&S Unit, will make the notification. This notification will be done by the fastest and best means available under the conditions. Normally, the telephone will be

used. In the event telephone circuits are disrupted, the next best means will be used. Again, judgment by the personnel involved must be exercised to assist the employee and the family. However, it is important that the family receive accurate as well as timely information. The information must also be offered in a compassionate, supportive, and understanding manner. Each employee has designated whom they want notified in the event of a serious injury and the employee's wishes must be respected. The designated person for notification can be found in the employee's personnel records, along with any special instructions.

The EC&S team will provide follow-up actions, such as updating the status of the employee's injuries and assisting the family.

DEATH OF AN EMPLOYEE

In the event a traumatic injury to an employee results in death, call 911 for assistance. Water utility employees are not the legal entities to make the determination of death. A medical doctor, paramedic, law enforcement officer, or member of the coroner's office must make the legal determination.

The senior person on site must take charge and assist emergency crews and other employees. A traumatic death causes others, especially those who knew and worked with the deceased, to be upset. This may range from a mild reaction to a more serious one, requiring first aid and medical assistance for the observer or co-worker. The senior person should notify the EOC and/or his/her supervisor, as rapidly as possible, of the accident and if co-workers are affected. The information needed is:

- Name of deceased employee;
- Employee number;
- Employee's Occupation;
- Nature of accident;
- Location of accident;
- Time of incident;
- Disposition of person (facility to which they were transported and method of transport);
- Name of emergency agency responding (obtain names if possible); and
- Name of individual providing report.

The family of the deceased employee will be notified as soon as possible after declaration of death. It is important that no one on site make notification. The deceased employee designated whom he/she wanted notified, and these desires must be respected. An on-site co-worker may not have the correct information.

Notification of a death can be made by the County Coroner; however, most counties prefer notification be made by a representative of the water utility.

Once the EOC or the Department head confirms a death has occurred, a notification decision will be made in coordination with an Employee Care & Support Unit representative. Employee emergency information will be confirmed. Under best conditions, the notification of death is made in person. A co-worker volunteer or member of the employee's supervisory chain, along with a representative of the EC&S Unit, will physically travel to the family and make notification. If the family is not in the local area, notification must be made by telephone.

In a worst-case scenario, telephones may not be operational and other means may be required to notify the family. The telephone may be used in cases where media coverage of the incident could result in the family being traumatically notified. Again, the best judgment of the individuals involved must be exercised to respect the employee's desires and support the family with compassion and understanding.

In situations involving either serious injury or death of an employee, follow up by Human Resources is vital. Assistance with workers' compensation, life insurance, rights, and benefits will be provided as soon as possible, given the emergency situation. The EC&S Unit will track this support. Other notifications, such as the Department of Industrial Relations (Cal OSHA) and the utility's insurance carrier must be made.

FAMILY INFORMATION REQUIREMENTS

During the first hours or days of an incident, employees and their families may have little or no contact with each other. This may be caused by the incident itself or because water utility employees and/or family members may be responding to the incident. An important factor to consider is that many employees will not report to work or will leave work if they are unsure about the welfare of their families. It is important to provide a dependable and easy method for them to contact each other and get information.

Employee Care and Support Unit (EC&S) staff will be responsible, in conjunction with Public Affairs staff, for the development of the messages on information hotlines. Additionally, EC&S staff will take and distribute messages from employees' families.

There should be two dedicated lines for use during declared emergencies: one dedicated for employee information, and the other dedicated for messages from employee family members. The EC&S staff will work with

Public Affairs staff to develop appropriate messages for each telephone line and written information for dissemination to employees.

Employee Emergency Information Hotline

This line will be accessible to all employees calling in for general information. During non-emergency times, the line will remain active but carry a standard message. The message will give the status of the emergency and direct employees where to call for further instructions regarding reporting for work. Information will be updated by EC&S staff periodically as appropriate to the situation.

Family Message Line

This line will be available for family members to call to leave messages for employees. EC&S staff will take calls as able; excess calls will be routed to voice mail for later handling. Messages will be routed by EC&S staff to individual employees as appropriate. Messages and updates for both lines will be recorded by EC&S staff.

Legal Responsibilities

It is the responsibility of the employer to review all applicable laws, codes, procedures, etc., required for emergency response personnel, first responders, and others that may become involved with emergency operations. Water utility officers and employees require special training and in some cases, certification to perform emergency work. The training section (section 13) and the references should be consulted to identify requirements applicable to water utilities involved in emergency response activities.

Section 10:
Mutual Aid & Assistance

OVERVIEW

This section discusses support, response, and coordination while using mutual aid or mutual assistance agreements. Helping others has long been one of the foundations of emergency planning and response in California. In times of crisis, when normal resources have not been able to meet emergency demand, emergency response providers have been able to call upon other emergency service providers and request help. The responding provider would send personnel and/or equipment as available. This form of help was formally authorized by the *California Disaster and Civil Defense Master Mutual Aid Agreement*, today known as the *California Master Mutual Aid Agreement* (MMAA). All 58 counties, almost all cities, and some special districts in California have become signatories.

The distinction between mutual aid and mutual assistance is that mutual aid is provided between and among government entities, including government water utilities, under the authority of the California Master Mutual Aid Agreement while mutual assistance is provided under other agreements. *Mutual Aid* is the provision of personnel, equipment, and supplies by the State of California, its various departments and agencies, and the various political subdivisions, municipal corporations, and other public agencies of the State of California during times of local peril or emergency. Other agreements, such as mutual assistance agreements, provide the same kinds of resources but the assistance is not provided under the authority of the California Master Mutual Aid Agreement.

The California Mutual Aid System is organized into specific geographic regions. A map showing California's Mutual Aid Regions is found on page 94.

UTILITY AID & ASSISTANCE IN CALIFORNIA

In 1952, utilities formally recognized the value of mutual aid and mutual assistance after the Los Angeles Department of Water and Power, Metropolitan Water District of Southern California, East Bay Municipal Utility District, and Sacramento Municipal Utility District signed an agreement to help each other during emergencies. This effort created the Utility Policy Committee which later became the California Utility Emergency Association (CUEA).

Public and private utilities in California have developed utility-specific mutual assistance agreements, which are not part of the State Mutual Aid System, for various utility types. They include gas, electric, telecommunications, wireless, water, wastewater, and pipeline. The purpose of these agreements is to provide a method for getting help from other utilities when normal resources are overwhelmed and additional personnel or resources are needed to respond to the needs of the community affected by an emergency. The assistance comes from another utility not affected by the emergency. This aid can be local (a neighboring utility) or from another part of the state. These agreements do not interfere with the support of government agencies by public utilities during local emergencies or a state of emergency.

PARTICIPATION IN ASSISTANCE AGREEMENTS

No requirements exist for a water utility to join an agreement. However, becoming a signatory to mutual assistance agreements is highly encouraged. Mutual assistance agreements are recognized as a prudent measure in preparing for emergencies. Public water utilities have several options when it comes to mutual aid or mutual assistance agreements. They can:

- utilize the authorities provided under the California Master Mutual Aid Agreement for mutual aid provided to and from other public utilities;
- become a signatory to an existing agreement with public or private utilities, for day-to-day mutual assistance;
- and/or create a mutual assistance agreement with other public and/or private water utilities.

Private utilities have no restrictions on mutual assistance agreements, except that they cannot be held to the authorities of the Master Mutual Aid Agreement, since they are not signatories. They also do not have the immunities of the Master Mutual Aid Agreement except arguably if they are under the specific direction of a government agency which is a signatory to the MMAA or is otherwise acting pursuant to the Emergency Services Act. During a local emergency or a state of emergency, no agreement can bind public resources to private sector needs. The resources of public sector utilities will be provided through the state and local mutual aid coordinators within the SEMS and the California Mutual Aid System.

In order for the exchange of personnel and resources to work well, utilities have created agreements that include the following principles:

- Establish a statewide program that provides protocols and direction for utilities to request help from other utilities.

- Create a method to gather resources and personnel from a utility in an unaffected area of the state and provide them to a similar utility that requests help because it is overwhelmed by an emergency.
- Provide resources and/or personnel voluntarily when mutual aid is not mandatory.
- Include resources, personnel, facilities or other types of support as part of the assistance available.
- A utility providing mutual aid and mutual assistance determines what personnel, resources, facilities or other support that may be provided and determines the limitations of the aid.
- Resources provided through mutual aid or mutual assistance become support at the scene. The mutual aid or mutual assistance does not take control of the scene or take over response.
- Mutual aid and mutual assistance are not to be used as a supplement to or substitute for an available work force during normal operations.

If a utility elects to create a utility mutual aid or mutual assistance agreement, the best starting point is to build from existing agreements. There are a number of activities that utility personnel must perform to become a party to an agreement. They include:

Chief Executive and/or Board

- Ensure emergency planning/preparedness policies are in place that include mutual aid and mutual assistance.
- Sign mutual aid or mutual assistance agreements.
- Sign Operational Area agreements. While mutual aid and mutual assistance can provide resource needs and support, information on impact and need for mutual aid/mutual assistance should be communicated to the Operational Area organization. This information will help the local government within the Operational Area determine whether or not to declare an emergency.

Emergency Planner

- Identify agreements that should be part of the water utility emergency plan. This should include any regional agreements and a statewide agreement. Form response agreements with neighboring agencies or utilities as appropriate.
- Identify how mutual aid and mutual assistance would be used to support the water utility Emergency Operations Plan.
- Incorporate mutual aid and mutual assistance checklists into the Emergency Operations Plan.

Operations Managers/Staff

- Review conditions where mutual aid and mutual assistance would be needed.
- Review minimum staffing needs in various conditions.
- Ensure staff are trained on the Standardized Emergency Management System to support incoming resources or when providing mutual aid and mutual assistance.

Additionally, there are a number of terms and conditions which should be included in a comprehensive agreement and no agreement should be considered without review by the utility's legal counsel. Key terms and conditions include:

- a formal structure for sending or receiving assistance;
- outlining how water utilities will participate;
- identifying the obligations to assist;
- defining how other agreements are affected;
- identifying how liability is managed;
- referencing the Emergency Services Act, Master Mutual Aid Agreement and SEMS when appropriate;
- defining emergency and normal work activities;
- for mutual assistance agreements: stating how the cost of equipment, material, and personnel will be calculated and reimbursement conducted;
- for mutual aid agreements: track the costs of equipment, material, and personnel and identify potential sources of reimbursement;
- liability and hold harmless statement between borrower and lender;
- limiting liability to the two parties involved in providing and receiving assistance;
- workers' compensation and employee claims;
- ways to modify or terminate the agreement; and
- dispute resolution.

Contact OES for more information regarding California's Mutual Aid System and CUEA regarding existing utility mutual assistance agreements. Some of the existing agreements/systems are briefly described below.

Existing Mutual Aid Agreement

California Master Mutual Aid Agreement

The Master Mutual Aid Agreement is activated when a disaster or other calamity strikes a jurisdiction and its needs exceed the available resources. Water utilities that are a part of city or county government, or are a special district that has signed the Master Mutual Aid Agreement, may have access to mutual aid for resources if they do not unreasonably deplete the resources of the providing jurisdiction. Private utility resources may be made available to other water utilities through agreements negotiated between the providing and the requesting utilities.

PROTOCOLS FOR REQUESTING AID

Water utility mutual assistance agreements enable utilities to contact one another directly for aid. The utility receiving the request can either fill the request or determine that assistance cannot be sent. Public water utilities assist each other under the provisions of the Master Mutual Aid Agreement when there is a condition of local peril or emergency or a state of emergency proclamation by the Governor. Public utilities may also provide support to private utilities under the specific provisions of mutual assistance agreements they have signed. Private utilities may provide support to public utilities and to other private utilities under the specific provisions of mutual assistance agreements they have signed.

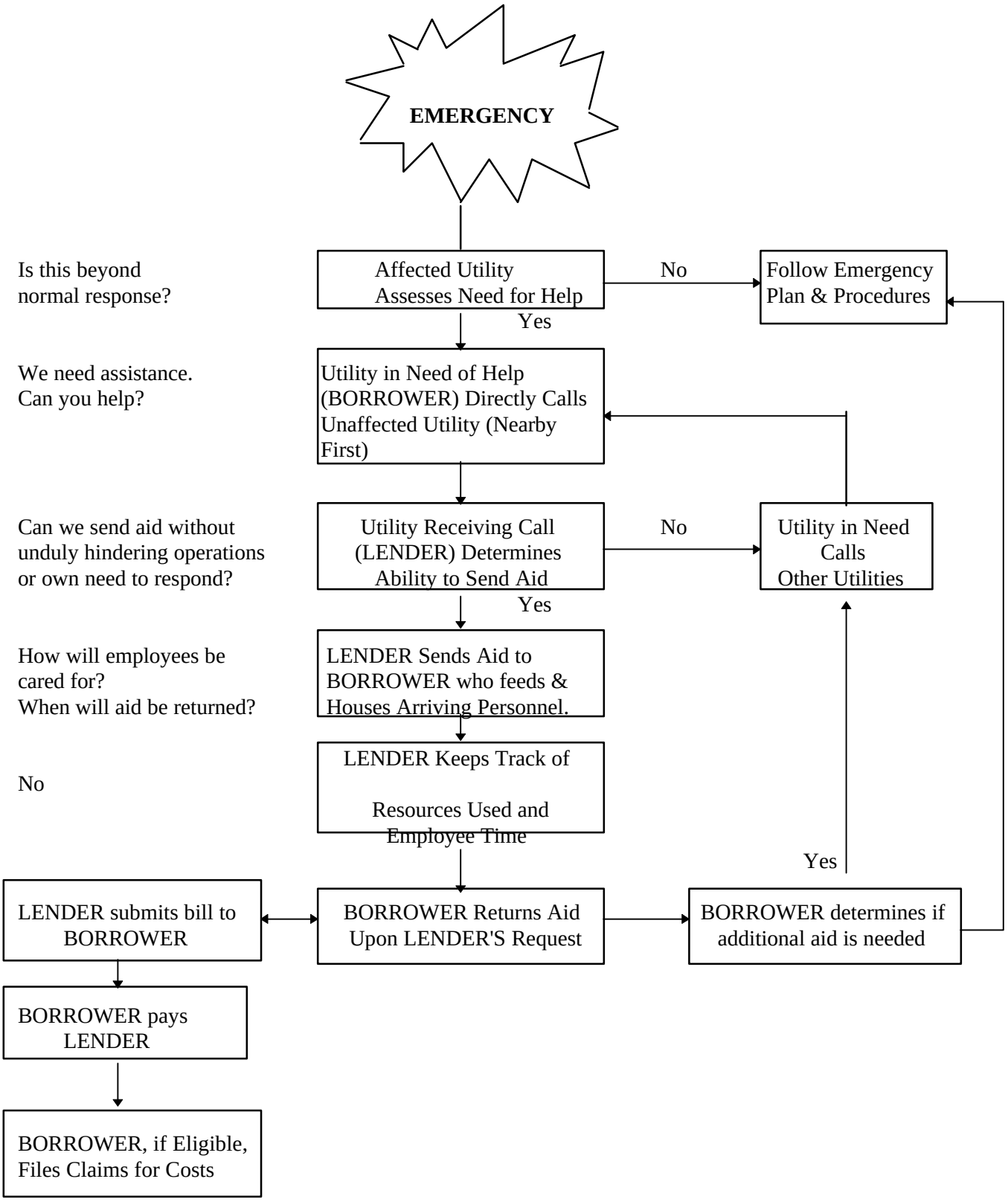
Because governmental agencies have a legal requirement to protect the health, safety and welfare of citizens and are responsible for maintaining emergency plans and coordinating mutual aid, utility mutual aid will function under the authority of emergency officials and under the principles, practices and regulations of the Standardized Emergency Management System. Any agreements for guaranteed provision of public resources from public utilities, to private utilities, during a disaster may be in violation of the Master Mutual Aid Agreement. Government authorities are in charge of coordinating all public resources during declared local emergencies and a state of emergency. Provision of those resources to assist a private utility could be made on a case-by-case basis by government authorities working within SEMS, and under standing agreements made prior to an event.

Any mutual aid or mutual assistance requests must be made in a manner that will ensure the best use of resources. Many water utility agreements enable utilities to contact one another directly for aid as is the case with many other agreements allowed under the Master Mutual Aid Agreement. However, during formal disaster and emergency conditions, public resources are provided to and from public utilities only through the Standardized Emergency Management System, and not through direct requests between public utilities.

During emergencies, the Utilities Branch of the local EOC, REOC, or SOC may be activated to collect information from the utilities in the affected area and to coordinate resource allocation by public utilities. In the case of catastrophic events, where multiple requests for the same aid arrive, the Utilities Branch may also facilitate determination of priorities so that resources go to the most critical locations. The diagram on page 93 illustrates how resources are obtained by a utility requesting assistance.

A water utility has an obligation, whether as a borrower or a lender, to make the most efficient use of its resources. A simple way to do this is to use checklists when receiving or sending mutual aid or mutual assistance. Example checklists are included in the Appendices.

MUTUAL ASSISTANCE RESOURCES FLOW CHART




OES
CALIFORNIA
Governor's Office of Emergency Services
Mutual Aid and Administrative Regions
Coastal Region
Inland Region
Southern Region
I
II
III
IV
V
VI

Section 11:
After-Action Reports

This section describes how to develop after-action reports, their purpose and value, and State of California requirements for submission. An After-Action Report (AAR) is a report covering emergency response actions, application of SEMS, modifications to plans and procedures, training needs, and recovery activities. The AAR serves the following functions:

- Provides a source for documentation of response activities.
- Identifies problems/successes during emergency operations.
- Analyzes the effectiveness of emergency plan implementation.
- Describes and defines a plan of action for implementing improvements.
- Provides a vehicle for documenting needed system improvements, and may serve as a work plan for implementing the improvements.

REQUIREMENTS FOR AFTER-ACTION REPORTS

There are no legal mandates for privately owned utilities to prepare AARs; however, SEMS (Title 19, California Code of Regulations, section 2450 (19CCR2450)) requires cities and/or counties which have declared a local emergency for which the Governor has declared a state of emergency to complete an AAR and submit it to OES within 90 days after the close of the incident period (defined in 19CCR2900(j)). Therefore, a public water utility which is part of a city or county may have to contribute to its city or county's AAR. Regardless, the AAR is a valuable tool which may be used by the utility to evaluate its response to emergencies and to plan improvements for responding to future emergencies.

Government Code section 8607(f) requires the Governor's Office of Emergency Services (OES), in cooperation with involved state and local agencies to complete an AAR within 120 days after each declared disaster. These governmental AARs will report information related to emergency response actions taken by the utilities. Utilities affected by the disaster will be asked by OES or local government to highlight any response actions that they took during the emergency, including interaction with the governmental Emergency Operation Centers (EOCs). Guidance for completing an AAR is available in the Standardized Emergency Management System Guidelines, *Part III: Supporting Documents, SEMS AARs,* developed by OES. Contact State OES to obtain the latest version of the form.

In addition, Government Code section 8607.2(b) requires public water systems with 10,000 or more service connections, following a declared state of emergency, to submit an assessment of their emergency response and recommendations to the Legislature within six months of each disaster, and to implement those recommendations in a timely manner.

Standardized Emergency Management System
AFTER-ACTION REPORT INSTRUCTION SHEET

WHO SHOULD COMPLETE THIS FORM

[Note: *Pursuant to §2450(a), Chapter 1, Division 2, Title 19 CCR, "Any city, city and county, or county declaring a local emergency for which the governor proclaims a state of emergency, and any state agency responding to that emergency shall complete and transmit an after action report to OES within ninety (90) days of the close of the incident period as specified in California Code of Regulations, Title 19, §2900(j)."]*

In addition, affiliated agencies such as contract ambulance companies, volunteer agencies including the American Red Cross and Salvation Army, and any other agency providing a response service during an actual occurrence, functional or full-scale exercise, are requested to complete this form.

Beyond the statutory requirement for after-action report, information collected through this process is important for the Governor's Office of Emergency Services to ensure the effectiveness of the Standardized Emergency Management System. Information is also utilized to demonstrate grant performance activity associated with FEMA training and exercise programs; as well as providing justification for future grant funded emergency management programs for California.

PART I - GENERAL INFORMATION

Please fill this information out completely. Check all boxes that apply. The following information is provided as additional clarification:

- TYPE OF AGENCY: If "other," indicate volunteer, contract, private business, etc.

- DATES OF EVENT: Beginning date is the date your agency first became involved in the response to the event or exercise. Ending date is the date the response phase or exercise was over.

- TYPE OF EVENT: Planned events are parades, demonstrations or similar occurrences.

PART II - SEMS FUNCTIONS EVALUATED

- TOTAL PARTICIPANTS: All participants in each principal SEMS function. It is not necessary to itemize the number participating in each element under the principal function.

- EVALUATION: If all elements of a principal SEMS function were generally satisfactory, circle (S). If deficiencies were noted (needs improvement), circle (NI).

- CORRECTIVE ACTION: If (NI) was circled under EVALUATION, indicate whether the corrective action pertains to "planning, training, personnel" etc. Further clarification should be provided in Part II, Questions 20-24, and Part III Narrative as desired.

- OTHER PARTICIPANTS: This box generally applies to exercises. Please indicate the total number of exercise staff, i.e., controllers, simulators, etc., and any community volunteers (simulated victims, moulage, etc.).

PART III - AFTER ACTION REPORT QUESTIONNAIRE

- QUESTIONS 1-19: Answer "YES, NO, or N/A (Not Applicable).

- QUESTIONS 20-24: Response to these questions should address areas identified as "N/I" or requiring "Corrective Action," in Part I; as well as any "NO" answers given to questions 1-19.

PART IV - NARRATIVE

This is optional space provided for further clarification and information relating to Parts II and III.

- FORM COMPLETED BY: Please print your name legibly in the space provided.

- REPORT DUE DATE: Please indicate the due date. (Ninety days from the end of the response phase, or completion of the exercise).

- DATE COMPLETED: The actual date the report is completed and sent to OES.

Please forward completed reports to your OES Administrative Region Office. Agencies are encouraged to maintain copies of this report on file for record-keeping purposes.

Coastal Region
(OAKLAND)
1300 Clay Street, Suite 408
Oakland, CA 94612
(510) 286-0895

Inland Region
(SACRAMENTO)
2800 Meadowview Road
Sacramento, CA 95832
(916) 252-1772

Southern Region
(LOS ALAMITOS)
11200 Lexington Drive
Building 283
Los Alamitos, CA 90720-5002
(562) 795-2900

PART I - GENERAL INFORMATION

NAME OF AGENCY:	**TYPE OF AGENCY:** [ ] City [ ] State Agency [ ] Other [ ] County [ ] Federal Agency _____ [ ] Operational Area [ ] Special District
OES ADMINISTRATIVE REGION: [ ] Coastal (Oakland Office) [ ] Inland (Sacramento Office) [ ] Southern (Los Alamitos Office)	**DATES OF EVENT: (MONTH/DAY/YEAR)** BEGAN: ___/___/____ ENDED: ___/___/____
TYPE OF EVENT: Exercise Type: **OR** [ ] Table Top [ ] Actual Occurrence [ ] Functional [ ] Planned Event [ ] Full-scale (Specify) _____	**TYPE OF HAZARD OR EXERCISE SCENARIO:** [ ] Avalanche [ ] Flood [ ] Terrorism [ ] Civil Disorder [ ] Fire (Structural) [ ] Tsunami [ ] Dam Failure [ ] Fire (Wildland) [ ] Winter Storm [ ] Drought [ ] Landslide [ ] Other (Specify) [ ] Earthquake [ ] Mudslide _____

PART II - SEMS FUNCTIONS EVALUATED

SEMS FUNCTION	TOTAL PARTICIPANTS (Each Function)	EVALUATION (Circle: (S)Satisfactory OR (NI)Needs Improvement)	CORRECTIVE ACTION REQUIRED: Check to indicate corrective action is required.				
			PLANNING	TRAINING	PERSONNEL	EQUIPMENT	FACILITIES
Management: Public Information, Safety, Liaison, Interagency Coordination, Security, etc.		S NI					
Command (Field): Public Information, Safety, Liaison, Interagency Coordination, Security, etc.		S NI					
Operations: Law Enforcement, Fire/Rescue, Const. & Engineering, Medical/Health, Care & Shelter, etc.		S NI					
Planning/Intelligence: Situation Status & Analysis, Documentation, Advance Planning, Demobilization, etc.		S NI					
Logistics: Services, Support, Facilities, Personnel, Procurement, Supplies, Equipment, Food, etc.		S NI					
Finance/Administration: Purchasing, Cost Unit, Time Unit, Compensation and Claims, etc.		S NI					
Other Participants: Exercise Staff, Community Volunteers, etc. (#_____)							
	Total: _____						

PART III - AFTER-ACTION REPORT QUESTIONNAIRE

This questionnaire must be completed for all functional or full-scale exercises, and actual occurrences. Responses to questions 20-24 should address areas identified as "needing improvement and corrective action" in Part I; as well as any "No" answers given to questions 1-19 below:

DISASTER NAME:	PLANNED EVENT/EXERCISE NAME:

QUESTION:		YES	NO	NA
1.	Were procedures established and in place for response to the disaster?			
2.	Were procedures used to organize initial and ongoing responses?			
3.	Was the ICS used to manage field response?			
4.	Was Unified Command considered or used?			
5.	Was your EOC and/or DOC activated?			
6.	Was the EOC and/or DOC organized according to SEMS?			
7.	Were sub-functions in the EOC/DOC assigned around the five SEMS functions?			
8.	Were response personnel in the EOC/DOC trained?			
9.	Were action plans used in the EOC/DOC?			
10.	Were action planning processes used at the field response level?			
11.	Was there coordination with volunteer agencies such as the Red Cross?			
12.	Was an Operational Area EOC activated?			
13.	Was Mutual Aid requested?			
14.	Was Mutual Aid received?			
15.	Was Mutual Aid coordinated from the EOC/DOC?			
16.	Was an inter-agency coordination group established at the EOC/DOC level?			
17.	Was communication established and maintained between agencies?			
18.	Was the public alerting and warning conducted according to procedure?			
19.	Was public safety and disaster information coordinated with the media?			

20. **What response actions were taken by your agency? Include such things as mutual aid, number of personnel, other resources:**

21. **As you responded, was there any part of SEMS that did not work for your agency? If so, how would (did) you change the system to meet your needs?**

22. **As a result of your response, are any changes needed in your plans or procedures? Please provide a brief explanation:**

23. **As a result of your response, please identify any specific areas not covered in the current SEMS-Approved Course of Instruction or SEMS Guidelines?**

24. **If applicable, what recovery activities have you conducted to date? Include such things as damage assessment surveys, hazard mitigation efforts, reconstruction activities, and claims filed:**

PART IV - NARRATIVE

The space below may be used if desired to provide additional comments pertaining to Part III questions 20-24, or for any additional observations:

FORM COMPLETED BY: **_____** **(Print Name)** **BUSINESS PHONE:** **( )**	**YOUR AGENCY NAME:**	**REPORT DUE DATE:** **_____/_____/_____** **DATE COMPLETED:** **_____/_____/_____**	**OES USE ONLY** **Date Received:** **Received By:**

Section 12:
Recovery

This section discusses actions water utilities can take to recover from disasters and mitigate hazards that present a threat during future disasters. It also summarizes the state and federal programs available to assist water utilities in these activities. The success of a recovery program is largely determined by the planning and preparedness that occurs prior to, and the response conducted during, the disaster. It is important to remember that no matter how effective the utilities' programs may be, the possibility of major damage still exists.

Preparing for a disaster includes mitigation activities to prevent or minimize the damage that will occur during a disaster. It includes the hazards assessment and vulnerability analysis discussed in section 3, followed by mitigation. The hazard mitigation program is discussed below. The second important aspect to minimizing the impact to the utility is the emergency response plan. As discussed in many parts of this document, the emergency response plan, and how the response activities are organized and conducted, will affect the time and expense of returning the water utility to normal operations.

The recovery process begins during the response phase. It is important to begin damage inspections and reporting, and recordkeeping as soon as the plan is activated. The items below may assist the water utility in recovery activities.

Initial Recovery Activities

- Designate a disaster recovery coordinator and notify all appropriate regulatory agencies.
- Complete detailed evaluations of all affected water utility facilities and determine priorities for permanent repair, reconstruction, or replacement at existing or new locations.
- Begin repair activities design and make bids for contractor services.
- Make necessary repairs to the system and untag repaired facilities and equipment.
- Restore all telecommunications, data processing, and similar services to full operation.

- Complete assessment of losses and costs for repair and replacement, determine approximate reimbursements from insurance and other sources of financial assistance, and determine how residual costs will be financed by the water utility.
- Define needs for additional staff, initiate recruitment process, and adopt temporary emergency employment policies as necessary.
- Execute agreements with vendors to meet service and supply needs.
- Reevaluate need for maintaining the emergency management organization; consider returning to the normal organizational structure, roles, and responsibilities when feasible.
- Collect cost accounting information gathered during the emergency and prepare request for Emergency Disaster Funds (follow FEMA and State OES requirements).
- Debrief staff to enhance response and recovery efforts in the future by identifying lessons learned, developing action plans and follow-up mechanisms, and providing employee assistance programs if needed.
- Prepare After-Action Reports as required. Complete reports within six months of the event (90 days for public utilities which are part of a city or county government.). Identify recommendations for legislation.

Long Term Recovery Activities

- Initiate permanent reconstruction of damaged water utility facilities and systems.
- Restore water utility operations and services to full pre-event levels.
- Continue to maintain liaison as needed with external agencies.

ASSISTANCE PROGRAMS

The State of California Office of Emergency Services administers several programs designed to assist victims of a disaster. They include Public Assistance, Individual Assistance, and Hazard Mitigation.

Public Assistance

Public Assistance (PA) administers state disaster relief programs under the Natural Disaster Assistance Act, and federal disaster assistance programs under various federal laws and regulations, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288 as amended), the Code of Federal Regulations (CFR), and the State Administrative Manual. These regulations designate the State of California as "grantee" for all federal public assistance funding available to agencies of state government, local governments, and certain private non-profit organizations that provide essential services of a governmental nature to the general public, including water utilities. As grantee, the state is responsible for the processing of sub-grants to public assistance applicants in accordance with 44 CFR, parts 13, 14, and 206, and its own policies and

procedures. PA works closely with the Federal Emergency Management Agency to process Damage Survey Reports. It dispatches inspection teams and conducts applicant briefings. This unit is led by OES, with support drawn from other state agencies.

Under the Public Assistance Program, public and private non-profit water utilities may be eligible for public assistance to reimburse the work and associated costs of responding to and recovering from a disaster if the costs:

- Are a direct result of the declared event and not a pre-disaster condition or result of some other event;
- Are located within the area designated by FEMA as eligible for assistance;
- Are the legal responsibility of the eligible applicant; and
- Are not eligible for assistance under another federal program (this applies to permanent restoration work only).

Individual Assistance

Individual Assistance (IA) performs a wide variety of functions and involves many state agencies to ensure individual, family, business, and farm recovery from disasters. Private, for profit water utilities may be eligible for disaster assistance in the form of low interest loans or grants to restore damaged structures, or replace inventories. Individual Assistance of this type is generally made available to private businesses when the ability to continue operations is terminated or impaired by a disaster. In addition, employees of a water utility may be eligible for disaster assistance in the form of funds for temporary housing, individual and family grants to meet disaster-related expenses, and loans to individuals for repair or replacement of real and personal property.

Hazard Mitigation

Following a presidential disaster declaration, the Hazard Mitigation Grant Program is activated. The program's purpose is to fund projects which are cost-effective and which substantially reduce the risk of future damage, hardship, loss, or suffering from a major natural disaster. Virtually all types of hazard mitigation projects are eligible provided they benefit the declared disaster area and meet basic project eligibility requirements. Types of eligible projects will be identified from those mitigation measures identified in the State Hazard Mitigation Plan, hazard mitigation team reports, and issues unique to the disaster event. The priorities of funding will be established and the program administered by OES.

EXPENDITURE

One of the critical aspects of any major emergency or disaster is collecting

DOCUMENTATION information on the costs related to response and recovery. The ability of the utility to recover costs or receive disaster assistance from the state and federal governments is predicated on its eligibility and ability to document its costs.

Example of Disaster-Related Expenditure Documentation For A Public Water Utility

All divisions' and departments' staff are required to maintain the documentation outlined below whenever the water utility is involved in the response to a declared (city, county, state) disaster.

Water Utility Staff Labor Expenses

Labor costs include regular and overtime wages and benefits for water utility staff assigned to disaster-caused response or recovery activities, including:

- persons assigned to perform essential disaster-caused tasks;
- persons conducting damage inspections;
- persons making emergency inspections and/or repairs;
- persons helping to evacuate and secure structures;
- persons conducting cleanup operations;
- persons assigned to record and document disaster-caused costs;
- persons assigned to disaster-caused construction supervision/management;
- persons assigned to disaster-caused vendor contract supervision/management;
- persons required to attend any disaster-caused meetings (internal or external);
- persons assigned to order and/or pick up disaster-caused supplies and equipment; and
- persons assigned to repair equipment used for disaster-caused response and recovery.

Required Documentation

All labor-related expenses must be documented daily on the Water Utility Emergency Labor Record signed by the employee and the work supervisor. This record must indicate the specific job site where work was performed, including any applicable job number. The Finance Section in the EOC will compile Daily Activity Reports for each person each day and separately for each job site.

Water Utility Equipment Expenses

Equipment costs include expenses for (water utility-established or rate schedules agreed upon by FEMA) all water utility-owned equipment utilized for disaster response and recovery. Only actual equipment usage is eligible for reimbursement. FEMA does not reimburse for equipment standby time.

Required Documentation

All equipment-related expenses must be documented daily on the Water Utility Emergency Job Site Record. This record must indicate the following information:

- type and description of equipment;
- specific site where equipment was used, including applicable job number;
- date and number of hours used per day; and
- name of operator(s) using equipment, where applicable.

The Finance Section in the EOC will compile Summary Equipment Activity Reports for each piece of equipment, and separately for each job site.

Water Utility Materials Expenses

Materials costs include expenses (actual purchase price) for all water utility-owned materials utilized for disaster response and recovery. Only materials used for disaster-related purposes at a specific job site may be reimbursable.

Required Documentation

All material-related expenses must be documented daily on the appropriate Water Utility Emergency Job Site Record, including the following information:

- type and description of material used;
- date and exact amount used;
- category of work material used for; and
- specific site where material was used, including applicable job number.

Outside Contractors

Materials

Invoices for contractor materials must include the following information:

- date material furnished;
- description of material;
- quantity of material furnished;
- unit cost of each item; and
- total amount of invoice.

The Finance Section in the EOC will note directly on each invoice where and/or how the material was used and the specific amount applicable to specific categories and job sites.

Equipment Rental

Invoices for equipment rental must include the following information for each piece of equipment:

- type and description of equipment;
- date(s) used;
- hours used each day;
- rate per hour (indicate with or without operator); and
- total rental cost.

Water utility staff must note directly on each invoice where and how the equipment was used, including specific categories and job sites. If equipment is rented from a private owner, responsibility for repair of the equipment should be specified in the rental agreement.

Other Political Subdivisions (Mutual Aid)

Invoices for labor and rental of publicly owned equipment must provide the same details as required by the water utility. The rates used to compute the amount claimed for equipment must be the lesser of either the FEMA-established rates or the water utility rates. Invoices for materials must give the same details as required for vendors. The unit costs used to compute the amount claimed must be the unit cost paid to the supplier, with nothing added for handling, overhead, etc.

Section 13:
Training

Completing the written plan is only the first phase of the planning process. Equally important to creating the plan is training personnel for content and use, and testing the plan to ensure its effectiveness-the employees' ability to use it.

Training Policy & Requirements

When the utility's management is approached to support the development of an emergency plan, it is critical that employee training on the plan be given equal value. Without training and routine testing of the plan, the plan, and the utility's response, may not be effective. The training policy can be an independent policy or part of overall emergency preparedness policy for the utility. Either way, it speaks to what is expected of the utility as a whole and various staff among the utility. An example of an independent policy is provided in this section, and an example of an overall preparedness policy that includes training was provided in Section 2 of the guidance.

In addition, training requirements exist for compliance with SEMS. They are found in the SEMS regulations located after the Government Code section of the Appendices.

Training Program

The purpose of a training program is to inform employees of what is expected of them, identify needed training, and teach employees how to use the plan and tools identified in the plan. The training program should address initial training, detailed assignment training, and ongoing refresher training. Training should include that necessary for certifications staff may need in handling hazardous chemicals, tools and equipment, or the jobs assigned to them in the emergency plan. Finally the program must have a method for testing the emergency plan. Drills and exercises that challenge the information in the emergency plan need to be conducted at least annually.

There are many sources (state, federal, and industry specific) that describe what should be included in an emergency training program. The bottom line is that time, resources and personnel need to be dedicated to accomplishing the training. A typical training program includes four

types of training and these are well explained in the California Specialized Training Institute's (CSTI) *Exercise Design* course.

Orientation Sessions

When introducing new or updated information, ideas, procedures, or tools, low stress presentation methods are best. Orientation sessions work well for basic instruction and explaining emergency procedures. These low stress environments allow students to absorb information and ask questions for clarity. Written tests may be employed to ensure some level of comprehension by the attendees. Many certification programs take this approach to training.

The Approved Course of Instruction (ACI) for SEMS developed by OES employs this style of training. Utilities need to also comply with hazardous materials handling training, health and safety training, and other procedural training.

Orientation training is recommended when introducing a new or updated emergency plan to those expected to carry out the procedures or when training new employees. These sessions can last anywhere from 1-8 hours at a time. A utility can expect to hold many orientation programs each year.

Table Top Workshops

The next level of training is Table Top workshops. It involves developing scenarios which describe potential problems and provides certain information necessary to address the problems. The idea is to present students with a fabricated emergency situation, have the students verbally respond to a series of questions and then evaluate whether the responses match what is written into the plan. If the responses do not match, evaluate the plan to see if updates or additional training are needed. A utility can expect to do several of these in preparation for the next level of training, the functional exercise. A table top can least anywhere from 3 to 8 hours and take a few weeks to prepare.

Functional Exercises

The Functional Exercise is considered the most effective training tool, next to a real emergency, because a team of simulators is trained to develop a realistic emergency. By using a series of pre-scripted messages, the simulation team sends information into staff assigned to carry out the emergency plan procedures. Both the simulators and staff responding to the simulation are focused on carrying out the procedures to test the validity of the plan. The federal standard in emergency training is to conduct one of these exercises each year. The preparation time varies for each utility, and may take up to 6 months to prepare. While a tremendous amount of employee time is needed to make this happen, it is the most appropriate use of time to test the emergency plan.

Full Scale Drills

These are the most costly and time-consuming drills. Field crews and equipment are mobilized and moved to a scene. A problem is presented to the crews, and they respond as directed by the emergency plan and Incident Commander at the scene. Because of the cost and time commitment involved in creating this type of program, the federal standard for these drills is one every four to five years, and take anywhere from 6 months to a year to plan.

Conclusion

The level of training on an emergency plan directly affects how well a utility's employees can respond to an emergency. The plan needs to be user-friendly to encourage training and assist in the ability of staff to use it. The training described in this section, if appropriately implemented, will help test the durability and usefulness of the plan.

(Name Inserted**) WATER UTILITY**
EMERGENCY RESPONSE TRAINING PROGRAM

POLICY STATEMENT:

PURPOSE: This is a critical statement because it will create a "climate" in which the training program will either survive and prosper, or deteriorate and become ineffective. It is generally promulgated and published by the (Company CEO or Agency Head). It provides program authority, scope, and direction.

Sample Statement: "It shall be the policy of this utility (company, district, etc.) to establish and maintain an emergency response training program which is sufficient in scope and depth to provide emergency response personnel with the following capabilities:

- Familiarization with the Standardized Emergency Management System (SEMS) as defined in this manual.
- Ability to perform the five basic SEMS functions in either a field operations or Emergency Operations Center environment.
- Ability to operate in a Unified Command organization with other agencies.
- Ability to function as an agency representative in an Inter-agency Coordination Group."

RESPONSIBILITIES:

PURPOSE: This section identifies key positions within the utility (company, district, etc.) responsible for implementing the policy. It assigns specific responsibilities to each position, thus providing accountability and structure for the training program.

[Sample Insert:]

UTILITY HEAD (CEO, District Manager):
Shall have overall responsibility for the implementation and maintenance of the emergency response training program.

REGIONAL VICE PRESIDENTS (Larger Water Utilities):
Shall ensure that personnel within their region receive the appropriate level of SEMS training, and can perform assigned duties within the water agency emergency organization.

SERVICE AREA MANAGERS (Larger Water Utilities) or DEPARTMENT MANAGER (Smaller Water Utilities):
Shall ensure that Service Area personnel receive the appropriate level of SEMS training, and can perform assigned emergency response duties in the field or within the Service Area EOC.

SUPERVISORS:
Shall maintain individual training plans for employees to ensure that appropriate training is provided. Shall ensure proficiency levels are maintained for all utility emergency response personnel under their supervision.

EMPLOYEES:
Each employee is responsible for attending all scheduled emergency response training, and for working with supervisors to identify additional training needs pursuant to their individual training plan.

TRAINING PLANS:

PURPOSE: This section provides a strategy for developing training plans for executives, managers, supervisors, and employees; this is to ensure that each level of the water emergency organization can perform effectively during an emergency response.

1. Mission of the Utility:

The first step in developing the overall agency training plan is to determine the water utility's role in responding to emergencies and disasters. A simple mission statement is useful as a framework for the plan.

[Sample Statement:]

"The mission of the _____ Water Utility (District, Agency etc.) in emergencies and disasters is the timely inspection of damage, and the expedient repair and restoration of water systems and service to critical facilities and customers within the service area(s)."

2. Classification of Agency Personnel:

The second step is to determine which positions will be responsible for carrying out the mission of the utility. In most instances, all personnel will participate in this endeavor; however, it is helpful to formally classify each level in the organization as follows:

[Sample Statement:]

"Pursuant to this policy, the following utility personnel are classified as *emergency response personnel* as defined within SEMS:

- All executive personnel, to include the utility head and regional vice presidents.
- All managers and supervisors.
- All line employees."

3. Positions, General Duties and Recommended Training:

The third step is a general focus on the types of duties each position would perform in an emergency response, along with corresponding training necessary to achieve proficiency.

[Sample Table:]

POSITION: Chief Executive / Utility Head

GENERAL DUTIES:
Overall utility emergency director. Would ensure that key executives are in place at the EOC and the mission of the utility is carried out. Is involved in key fiscal decisions and establishing utility priorities during disasters. Would interact with board of directors or other policy groups as required.

RECOMMENDED TRAINING: SEMS EXECUTIVE COURSE (Module 1 Only)

POSITION: Regional Vice-Presidents
GENERAL DUTIES:
Perform the duties of regional emergency directors, responsible for activation of regional EOCs or coordination centers. Would oversee all response activity for Service Areas within the region, ensuring that service area managers are in place, and coordinating the emergency response. Would provide regular status reports on conditions within the region to the Chief Executive.

RECOMMENDED TRAINING: SEMS EXECUTIVE COURSE (Modules 1 & 2)
SEMS EOC COURSE

POSITION: Service Area Managers or Department Manager

GENERAL DUTIES:
As applicable, are responsible for activating service area EOCs or coordination centers and coordinating directly with supervisors performing SEMS functions within the EOC, and/or at field command posts. Would provide regular status reports on conditions within the service area to the Regional Vice-President and EOC as appropriate.

RECOMMENDED TRAINING: SEMS EXECUTIVE COURSE (Modules 1 & 2)
SEMS EOC COURSE

POSITION: Supervisors

GENERAL DUTIES:
Responsible for direct supervision of emergency responders involved in performing SEMS functions in EOCs, coordination centers, or field command posts. Would keep service area managers and/or regional EOCs informed of all significant emergency response activity. Would ensure that priorities are addressed and that adequate resources are available for personnel under

their supervision. May be assigned as an agency representative at a local government or operational area EOC.

RECOMMENDED TRAINING: SEMS INTRODUCTORY COURSE
SEMS EOC COURSE
SEMS FIELD COURSE (I-100, I-200, I-300)

POSITION: Line Employees

GENERAL DUTIES:
Responsible for performing SEMS functions in EOCs, coordination centers, or field incident sites. Would keep supervisors informed of problems, significant issues, and additional resources required to ensure that service systems are restored in a timely manner. May be assigned as an agency representative at a local government or operational area EOC.

RECOMMENDED TRAINING: SEMS INTRODUCTORY COURSE
SEMS EOC COURSE
SEMS FIELD COURSE (I-100, I-200, I-300)

CALIFORNIA STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) *APPROVED COURSES OF INSTRUCTION*				
COURSE NAME	**TARGET AUDIENCE**	**INSTRUCTIONAL GOAL**	**NO. MODULES DURATION**	**TYPE COURSE**
Introductory Course	For all water agency personnel that may become involved in multi-agency or multi-jurisdictional response at any level.	Provides basic understanding of SEMS, common terms, and information required to work within and support a SEMS response.	Three modules 1-2 hours	Self-study with instructor option. Test is optional.
Field (ICS)Course ========== **ICS Orientation I-100**	Intended as a progressive program. A general orientation to ICS for water agency personnel working in field support roles, and for personnel who require a minimum ICS orientation.	Reviews ICS organization, basic terminology for resources and facilities, and responsibilities related to an incident.	Module #1 1 hour	Self-study. Optional test
ICS Basic I-200	Water agency personnel who respond to an incident to assist or support the organization but do not normally supervise others.	Covers features and principles of ICS, organization, incident resources and facilities, and common responsibilities.	Modules #2-6 12 hours	Instructor-based with exercises and tests.
ICS Intermediate I-300	Water agency personnel who supervise an ICS branch, division, group, or unit, or are members of the Command Staff.	Covers incident organization, resource management, air operations, incident and event planning.	Modules #7-11 22 hours	Instructor-based with exercises and tests.
ICS Advanced I-400	Water agency personnel who will supervise sections; Command Staff; Incident or Area Commanders; also those who may assume key agency management roles over incidents.	Covers General and Command Staff roles in depth, major incident management, Unified and Area Command. Also addresses Calif. Mutual Aid, and coordination between the field, local government & Op. Area EOCs.	Modules #12-17 22 hours	Instructor-based with exercises and tests.
Emergency Operations Center Course	Water agency personnel who will fill support, supervisory, or management roles in the agency EOC or EOC at a regional or service area level.	Covers principles of disaster and EOC management, field and local EOC interface, SEMS functional areas, concepts and procedures, intelligence, and mutual aid for all EOC levels.	Nine modules *12 hours *8 hours if Intro. Course taken previously	Instructor-based. Five modules for all EOCs. Four additional modules to cover each SEMS EOC level.
Executive Course	Water agency executives, administrators and policy makers within agencies that are required to support a SEMS emergency response.	Provides background of the law, common terms, basic elements of SEMS, organizational roles and titles, and the need for executive support.	Two modules 2-3 hours	Self-study or Instructor-based.

NOTE: Course delivery times may vary substantially depending on the experience level of the audience. SEMS User Organizations must assess internal training needs and make adjustments as required.

Section 14:
Appendices

This section provides detailed information that may not be necessary for every reader. The information in the appendices is often useful for implementing the plan. Appendices might include such things as:

- Forms and Checklists
- Example Messages and Declarations
- Glossary of Definitions/Acronyms
- List of References or excerpts from such documents
- Laws and Regulations
- Standard Operating Procedures

The following information is provided to assist the reader:

REFERENCES

California Government Code, Title 2, Division 1, Chapter 7 (Emergency Services Act).

California Code of Regulations, Title 19, Division 2, Chapters 1-SEMS, 2-Individual and Family Grant Program, and 6-Natural Disaster Assistance Act.

State of California Emergency Plan, 1997.

California Disaster and Civil Defense Master Mutual Aid Agreement, Office of Emergency Services, November, 1950.

American Water Works Association, Hazard Assessment.

SEMS Guidelines, Standardized Emergency Management System, Office of Emergency Services, March, 1995.

SEMS Approved Course of Instruction, Standardized Emergency Management System, Office of Emergency Services, March, 1996.

Multi-Agency Emergency Response Procedures for Potable Water Procurement and Distribution, Office of Emergency Services, January, 1996.

Emergency Planning Guidance for Local Government, Office of Emergency Services, September, 1997.

Emergency Operations Plan, East Bay Municipal Utility District, April, 1995.

Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, United States Code, Title 42.

Emergency Handbook for Water Supply Managers, Department of Water Resources, 1989.

ACRONYMS

The following acronyms are used throughout this planning guidance document:

AAR: After-Action Report

AWWA: American Water Works Association

CUEA: California Utilities Emergency Association

DOC: Department Operations Center

DFO: Disaster Field Office

EOC: Emergency Operations Center

FEMA: Federal Emergency Management Agency

ICS: Incident Command System

MACS: Multi-Agency Coordination System

OES: California Governor's Office of Emergency Services

REOC: Regional Emergency Operations Center

SEMS: Standardized Emergency Management System

SOC: State Operations Center

SOP: Standard Operating Procedures

GLOSSARY

The following definitions are a compilation of terms used by different sources. The sources include the State Office of Emergency Services (OES), Standardized Emergency Management System (SEMS), and federal sources (Federal). The origin of the term is in notation in parentheses ( ).

Instruction: Each utility should add definitions of terms used within that utility's emergency plan.

- A -

Action Plan (SEMS)
The plan prepared in the EOC containing the emergency response objectives, overall priorities, and supporting activities for a designated period. The plan is shared with supporting agencies. (See also Incident Action Plan.)

Aerial Reconnaissance
A look at damage from an airplane or helicopter. Staff may call upon local governments to help view and assess the damaged area. The process includes gathering information on the type and extent of damage and identifying potential hazardous areas for further on-site inspections.

After-Action Report (SEMS)
A report covering response actions, application of SEMS, modifications to plans and procedures, training needs, and recovery activities. After-Action Reports are required under SEMS after any emergency which requires a declaration of an emergency. Reports are required by OES from cities and counties within 90 days. Legislative reports are required by Government Code Section 8607.2 within six months.

Agency Executive or Administrator (SEMS)
Chief executive officer (or designee) of the agency or jurisdiction that has responsibility for the incident.

Agency Representative (SEMS)
An individual assigned to an incident or to an EOC from an assisting or cooperating agency who has been delegated authority to make decisions on matters affecting that agency's participation at the incident or at the EOC. Agency Representatives report to the Liaison Officer at the incident, or to the Liaison Coordinator at an EOC.

Allocated Resources (SEMS)
Resources dispatched to an incident.

American Water Works Association (AWWA)

AWWA is a national non-profit, professional organization designed to enhance water utility staff and management skills. The California/Nevada section has an Emergency Planning Committee whose mission is to promote and accelerate emergency preparedness, response and recovery; planning among water utilities; provide expertise in water utility emergency planning; and support intra-discipline emergency planning activities among other utilities.

Area Command (SEMS)
An organization established to: 1) oversee the management of multiple incidents that are each being handled by an Incident Command System organization; or 2) to oversee the management of a very large incident that has multiple Incident Management Teams assigned to it. Area Command has the responsibility to set overall strategy and priorities, allocate critical resources based on priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed.

Assigned Resources (SEMS)
Resources checked in and assigned work tasks on an incident.

Assignments (SEMS)
Tasks given to resources to perform within a given operational period, based upon tactical objectives in the Incident or EOC Action Plan.

Assistant (SEMS)
Title for subordinates of the Command Staff positions at the Field SEMS level. The title indicates a level of technical capability, qualifications, and responsibility subordinate to the primary positions. Assistants may also be used to supervise unit activities at camps.

Assisting Agency (SEMS)
An agency directly contributing tactical or service resources to another agency.

Available Resources (SEMS)
Incident-based resources which are available for immediate assignment.

- B -

Branch (SEMS)
The Operations or Logistics Section may establish branches to maintain an optimum span of control. Branches are a gathering of resources according to a function or response to a geographic area. The Branch level is organizationally between Section and Division/Group in the Operations Section, and between Section and Units in the Logistics Section. Branches are identified by the use of Roman Numerals or by functional name (e.g., medical, security, etc.).

Branch Director (SEMS)

The ICS title for individuals responsible for supervision of a Branch at the Field Level. At SEMS EOC levels, the title Branch Coordinator is preferred.

- C -

Cache (SEMS)
A pre-determined complement of tools, equipment, and/or supplies stored in a designated location, available for incident use.

California Utility Emergency Association, Inc. - CUEA
CUEA is a non-profit association supported by memberships from gas, electric, telecommunications, water, wastewater, and pipeline utilities. The Association coordinates and facilitates utility-related emergency planning and recovery concerns in California. CUEA also trains volunteer utility staff to support the state emergency operations centers and address utility-related emergency concerns.

Chain of Command (SEMS)
A series of management positions in order of authority.

Check-in (SEMS)
The process whereby resources first report to an incident or into an EOC. Check-in locations at the SEMS Field level include: Incident Command Post (Resources Unit), Incident Base, Camps, Staging Areas, Helibases, Helispots, and Division Supervisors (for direct line assignments).

Clear Text (SEMS)
The use of plain English in radio communications transmissions. No Ten Codes or agency specific codes are used when utilizing Clear Text.

Command (SEMS)
The act of directing, and/or controlling resources **at an incident** by virtue of explicit legal, agency, or delegated authority. May also refer to the Incident Commander.

Command Post (SEMS)
(See Incident Command Post.)

Command Staff (SEMS)
The Command Staff **in the field** consists of the Information Officer, Safety Officer, and Liaison Officer. They report directly to the Incident Commander. They may have an assistant or assistants, as needed. These functions may also be found at the EOC. At the EOC, they would report to the EOC Director.

Compensation Unit/Claims Unit (SEMS)

Functional unit within the Finance/Administration Section responsible for financial concerns resulting from property damage, injuries, or fatalities at the incident or within an EOC.

Complex (SEMS)
Two or more individual incidents located in the same general area which are assigned to a single Incident Commander or to a Unified Command.

Cooperating Agency (SEMS)
An agency supplying assistance other than direct tactical or support functions or resources to the incident control effort (e.g., American Red Cross, telephone company, etc.).

Coordination (SEMS)
The process of systematically analyzing a situation, developing relevant information, and informing appropriate command authority of viable alternatives for selection of the most effective combination of available resources to meet specific objectives. The coordination process (which can be either intra- or inter-agency) does not involve dispatch actions. However, personnel responsible for coordination may perform command or dispatch functions within the limits established by specific agency delegations, procedures, legal authority, etc. Multi-agency or inter-agency coordination is found at all SEMS levels.

Coordination Center (SEMS)
Term used to describe any facility that is used for the coordination of agency or jurisdictional resources in support of one or more incidents.

- D -

Damage Inspection
Designated staff trained in inspection reporting will review damaged facilities, record information, post inspection tags, and communicate with a central facility.

Decontamination or Contamination Control:
Radioactive Materials (OES)
The reduction (normally by removal) of radioactive material from a structure, area, person or object. Decontamination may be done by treating (e.g., washing down or sweeping) the surface and removing of the material. Contamination control is accomplished by isolating the area or object and letting the material stand so that the radioactivity is decreased by natural decay. Contaminated material may be covered to prevent redistribution and/or to provide shielding.

Other Hazardous Materials (OES)
Decontamination is done by removing the material and/or changing the chemical nature to a non-hazardous substance. The required decontamination depends on many factors. In general, the more harmful the contaminant, the more extensive and thorough decontamination must be. Less harmful contaminants may require less decontamination. The exact procedure to use must be determined after evaluating specific factors of the incident. By using the correct method of

cleaning protective equipment, and the use of work zones, responders will minimize cross-contamination from protective clothing to wearer, equipment to personnel, and one area to another.

Delegation of Authority (SEMS)
A statement provided to the Incident Commander by the Agency Executive delegating authority and assigning responsibility. The Delegation of Authority can include objectives, priorities, expectations, constraints, and other considerations or guidelines as needed. Many agencies require written Delegation of Authority to be given to Incident Commanders prior to their assuming command on larger incidents.

Department Operations Center (SEMS)
A facility used by a distinct discipline, such as flood operations, fire, medical, hazardous material, or a unit, such as Department of Public Works, or Department of Health. Department Operations Centers may be used at all SEMS levels above the field response level, depending upon the needs of the emergency.

Deputy Incident Commander (Section Chief or Branch Director) (SEMS)
A fully qualified individual who, in the absence of a superior, could be delegated the authority to manage a functional operation or perform a specific task. In some cases, a Deputy could act as relief for a superior and therefore must be fully qualified in the position. Deputies may also be found, as necessary, at all SEMS EOC levels.

Disaster (SEMS)
A sudden calamitous emergency event bringing great damage, loss, or destruction.

Disaster Field Office - DFO (Federal)
A facility established by FEMA in consultation with California OES in or near the disaster area. It is used as a point of coordination and control for state and federal efforts to support disaster relief and recovery operations.

Disaster Service Worker - DSW (OES)
Public employees are considered Disaster Service Workers (DSWs). Section 3100, Chapter 8 of the Government Code identifies public employees as DSWs and requires them to remain at or return to work during emergencies. Public employees would receive pay for their services.

Disaster Support Area - DSA (OES)
A designated facility at the periphery of a disaster area, where disaster relief resources (labor and material) can be received, stockpiled, allocated, and dispatched into the disaster area. A separate portion of the area may be used for receiving and treating casualty evacuees before moving them to adequate medical care facilities.
Disaster Welfare Inquiry - DWI (OES)

A service that provides health and welfare reports about relatives and certain other individuals believed to be in a disaster area. This operation normally begins when the people are relocated or normal communications are disrupted by the disaster.

Dispatch (SEMS)
The implementation of a command decision to move a resource or resources from one place to another.

Dispatch Center (SEMS)
A facility from which resources are assigned to an incident.

Division (SEMS)
Divisions are used to divide an incident into geographical areas of operation. Divisions are identified by alphabetic characters for horizontal applications, and often, by numbers when used in buildings. Divisions are also used at SEMS EOC levels and are found organizationally between Branches and Units.

Division or Group Supervisor (SEMS)
The position title for individuals responsible for command of a Division or Group at an Incident. At the EOC level, the title is Division Coordinator.

- E -

Electromagnetic Pulse - EMP (OES)
A large amount of energy released by the detonation of a high altitude nuclear weapon. A small amount of this energy appears as a high intensity, short duration, electromagnetic pulse (EMP), somewhat similar to that generated by lightning. EMP can cause damage or malfunction in unprotected electrical or electronic systems. When nuclear weapons are detonated at high altitudes, EMP damage can occur almost instantaneously over very large areas. All unprotected communications equipment is susceptible to damage or destruction by EMP, including broadcast stations, radios, televisions, car radios, and battery-operated portable transistor radios.

Emergency (Federal)
Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe in any part of the United States that requires federal emergency assistance to help state and local efforts to save lives and protect public health and safety or to avert or lessen the threat of a disaster.

(California Emergency Services Act): A condition of disaster or of extreme peril to the safety of persons and property caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy ..... shortage, plant or animal infestations or disease, the Governor's warning of an earthquake or .... volcanic prediction, or an earthquake or other conditions, other than conditions resulting .. from a labor controversy.

Emergency Alert System (Federal)
A system that enables the President and federal, state, and local governments to communicate through commercial radio and television broadcast stations with the general public in the event of a disaster.

Emergency Management (OES)
Operational control and/or coordination of emergency operations at each level of government. This can include the actual direction of field forces or the coordination of joint efforts of government and private agencies supporting such operations.

Emergency Management Coordinator (SEMS)
The individual within each jurisdiction that is delegated the day-to-day responsibility for the development and maintenance of all emergency management coordination efforts.

Emergency Management Director Emergency Services Director (SEMS)
The individual within each political subdivision that has overall responsibility for jurisdiction emergency management. For cities and counties, this responsibility is commonly assigned by local ordinance.

Emergency Medical Technician - EMT (SEMS)
A health-care specialist with particular skills and knowledge in pre-hospital emergency medicine.

Emergency Operations Center - EOC (SEMS)
A location from which centralized emergency management can be performed. EOC facilities are established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency.

Emergency Operations Plan - EOP (SEMS)
The plan that each jurisdiction has and maintains for responding to appropriate hazards.

Emergency Organization (OES)
Civil government augmented or reinforced during an emergency by elements of the private sector, auxiliaries, volunteers, and people impressed into service.

Emergency Period (OES)
A time period that begins with the recognition of an existing, developing, or impending situation that poses a potential threat to a community. It includes preparedness, warning (where applicable), and impact phases and continues until immediate and later effects of the disaster no longer are a hazard to life or threat to property.

Emergency Plans (OES)
Official and approved documents that describe principles, policies, emergency actions, methods, and procedures to be applied in carrying out emergency operations or rendering mutual aid during

emergencies. These plans include such elements as continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information.

Emergency Public Information - EPI (OES)
Information given to the public by official sources during an emergency, using broadcast and print media. EPI includes: (1) instructions on survival and health preservation actions to take (what to do, what not to do, evacuation procedures, etc.), (2) status information on the disaster situation (number of deaths, injuries, property damage, etc.), and (3) other useful information (state/federal assistance available).

Emergency Public Information System (OES)
The network of information officers and their staffs who operate from all levels of government within the state. The system also includes the news media through which emergency information is released to the public.

Emergency Response Agency (SEMS)
Any organization responding to an emergency or providing mutual aid support to such an organization, whether in the field, at the scene of an incident, or to an operations center.

Emergency Response Personnel (SEMS)
Personnel involved with an agency's response to an emergency.

EOC Action Plan (SEMS)
The plan developed to list the jurisdiction's objectives, actions to be taken, assignments, and supporting information for the next operational period. This is prepared at the EOC.

Essential Facilities (OES)
Facilities required for maintaining the health, safety, and well-being of the public following a disaster (e.g., hospitals, police and fire department buildings, utility facilities, etc.). These facilities may include buildings that have been designated for use as mass-care facilities (e.g., schools, churches, etc.).

Evacuation (OES)
A request by local law or fire agency for citizens and businesses to vacate premises due to emergency condition.

Evacuee (OES)
An individual who moves or is moved from a hazard area to a less hazardous area, with anticipation of return when the hazard becomes less dangerous.

Event (SEMS)

A planned, non-emergency activity. ICS can be used as the management system for a wide range of events, e.g., parades, concerts, or sporting events.

Expedient Shelter (Federal)
Any shelter constructed in an emergency or crisis period on a "crash basis" by individuals, single families, or small groups of families. This includes tents, lean-tos, etc.

- F -

Fallout Shelter (Federal)
A habitable structure or space used to protect its occupants from radioactive fallout. Criteria (National Shelter Survey requirements) includes a protection factor of 40 or greater, a minimum of 10 square feet of floor space per person, and at least 65 cubic feet of space per person. In unventilated underground space, 500 cubic feet of space per person is required.

Federal Assistance (Federal)
Aid to disaster victims or state or local government by federal agencies under the provision of the Robert T. Stafford Act (previously known as the Federal Disaster Relief Act) and other statutory authorities of federal agencies.

Federal Coordinating Officer - FCO (Federal)
The person appointed by the President to coordinate federal assistance following an emergency or major disaster declaration.

Federal Emergency Management Agency - FEMA (OES)
Federal planning, training, and response organization identified to support state and local government response to declared emergencies.

Federal Energy Regulatory Commission - FERC (OES)
Federal agency directed to work with energy producing facilities to monitor compliance with planning, creating, and training staff on emergency response to energy-producing systems.

Field Operations Guide (SEMS)
A pocket-size manual of instructions on the application of the Incident Command System.

Finance/Administration Section (SEMS)
One of the five primary functions found at all SEMS levels; responsible for all costs and financial considerations. At the incident, the Section can include the Time Unit, Procurement Unit, Compensation/Claims Unit, and Cost Unit.

Function (SEMS)

Refers to the five major activities in the SEMS, i.e., Command, Operations, Planning/Intelligence, Logistics, and Finance/Administration. At the EOC, the term Management replaces Command. The term function is also used when describing the activity involved, e.g., "the planning function."

- G -

General Staff (SEMS)
The group of management personnel reporting to the Incident Commander or to the EOC Director. They may each have a deputy, as needed.

Operations Section Chief
Planning/Intelligence Section Chief
Logistics Section Chief
Finance/Administration Section Chief

Generic ICS (SEMS)
Refers to the description of ICS that is generally applicable to any kind of incident or event.

Governor's Authorized Representative (Federal)
The person named by the Governor in a Federal/State Agreement to execute, on behalf of the state, all necessary documents for disaster assistance, following the declaration of an Emergency or Major Disaster by the President, including certification of applications for public assistance.

Group (SEMS)
Groups are established to divide the incident into functional areas of operation. Groups are composed of resources assembled to perform a special function not necessarily within a single geographic division (see division). Groups are located between Branches (when activated) and Resources in the Operations Section.

- H -

Hazard (OES)
Any source of danger or element of risk to people or property.

Hazard Area (OES)
A geographically identifiable area in which a specific hazard presents a potential threat to life and property.

Hierarchy of Command (SEMS)
(See Chain of Command.)

- I -

Incident (SEMS)
An occurrence or event, either human-caused or by natural phenomena, that requires action by emergency response personnel to prevent or minimize loss of life or damage to property and/or natural resources.

Incident Action Plan (SEMS)
The plan developed at the field response level which contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written.

Incident Base (SEMS)
Location at the incident where the primary logistics functions are coordinated and administered. (Incident name or other designator will be added to the term "Base.") The Incident Command Post may be collocated with the Base. There is only one Base per incident.

Incident Commander (SEMS)
The individual responsible for the command of all functions at the field response level.

Incident Command Post - ICP (SEMS)
The location at which the primary command functions are executed. The ICP may be collocated with the incident base or other incident facilities.

Incident Command System - ICS (SEMS)
The nationally used standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of resources to effectively accomplish stated objectives pertinent to an incident.

Incident Management Team (SEMS)
The Incident Commander and appropriate General and Command Staff personnel assigned to an incident.

Incident Objectives (SEMS)
Statements of guidance and direction necessary for the selection of appropriate strategy(ies), and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.

Information Officer (SEMS)

A member of the Command Staff responsible for interfacing with the public and media or with other agencies requiring information directly from the incident. There is only one Information Officer per incident. The Information Officer may have assistants. This position is also referred to as Public Affairs or Public Information Officer in some disciplines. AT SEMS EOC levels, the information function may report directly to the EOC Director.

Initial Action (SEMS)
The actions taken by resources which are the first to arrive at an incident.

Initial Response (SEMS)
Resources initially committed to an incident.

Institutionalized People (OES)
People who reside in public or private group quarters rather than households, e.g., residents of hospitals, nursing homes, orphanages, colleges, universities, and correctional facilities. These residents often lack significant household possessions or transportation, or require special care and custody.

- J -

Joint Emergency Operating Center - JEOC (OES)
A facility staffed by representatives of city, county, state, and federal agencies and private organizations. The center is usually located just outside the disaster area in order to coordinate and support emergency operations within the disaster area and may have the capability of providing a communications link between any Mobile Emergency Operating Center established in the disaster area and the State Operations Center in Sacramento.

Jurisdiction (SEMS)
Sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority for incident mitigation. Jurisdictional authority at an incident can be political/geographical (e.g., special district, city, county, state, or federal boundary lines), or functional (e.g., police department, health department).

Jurisdictional Agency (SEMS)
The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.

- L -

Leader (SEMS)
The ICS title for an individual responsible for a functional unit, task forces, or teams.

Liaison Officer (SEMS)
A member of the Command/Management Staff responsible for coordinating with representatives from cooperating and assisting agencies.

Life-Safety (SEMS)
Refers to the joint consideration of both the life and physical well-being of individuals.

Lifelines
Refers to the infrastructure of gas, electric, water, wastewater, telecommunications, pipelines, railroads, and highway systems.

Local Emergency (OES)
The duly proclaimed existence of conditions of disaster or of extreme peril to the safety or persons and property within the territorial limits of a county, city and county, or city, caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, earthquake or other conditions which are, or are likely to be, beyond the control of the services, personnel, equipment, and facilities of a political subdivision and require the combined forces of other political subdivisions to combat.

Local Government (SEMS)
Local agencies per Article 3 of the SEMS regulations. Government Code Section 8680.2 defines local agencies as any city, city and county, county, school district or special district.

Local Government Advisory Committee - LGAC (SEMS)
Committees established by the Director of OES to provide a forum for the exchange of information among the cities and counties of a Mutual Aid Region. The LGAC may develop a consensus of action and policy among local emergency managers on issues, policies, and programs of concern to local governments, and if necessary, bring such concerns to the attention of OES Executive Management.

Logistics Section (SEMS)
One of the five primary functions found at all SEMS levels. The Section responsible for providing facilities, services, and materials for the incident or at an EOC.

- M -

Major Disaster (Federal)
Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe in any part of the United States. The President makes this proclamation when the damage is severe and the magnitude significant enough to warrant disaster assistance under the Robert T. Stafford Act (formerly known as the Federal Disaster Relief Act).

Management by Objectives (SEMS)

This is a top-down management activity which involves a three-step process to achieve the desired goal. The steps are: establishing the objectives, selection of appropriate strategy(ies) to achieve the objectives, and the direction or assignments associated with the selected strategy.

Mass-Care Facility (OES)
A location, such as a school, where temporary lodging, feeding, clothing, registration, welfare inquiry, first aid, and essential social services can be provided to disaster victims during the immediate/sustained emergency period.

Master Mutual Aid Agreement (OES)
The California Disaster and Civil Defense Master Mutual Aid Agreement, made and entered into by and between the State of California, its various departments and agencies, and political subdivisions of the state, is intended to make aid available in the event of a disaster of such magnitude that it is, or is likely to be beyond the control of a single party and requires the combined forces of several or all of the parties to this agreement to combat.

Marshaling Area (SEMS)
An area used for the completed mobilization and assemblage of personnel and resources prior to their being sent directly to the disaster-affected area. Marshaling Areas are utilized particularly for disasters outside of the continental United States.

Media (OES)
Means of providing information and instructions to the public, including radio, television, and newspapers.

Mitigate (OES)
To reduce, avoid, or protect against the expected effects of future Major Disasters or Emergencies.

Mobilization (SEMS)
The process and procedures used by all organizations federal, state, and local for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

Mobilization Center (SEMS)
An off-incident location at which emergency service personnel and equipment are temporarily located pending assignment to incidents, release, or reassignment.

Multi-Agency or Inter-Agency Coordination (SEMS)
The participation of agencies and disciplines involved at any level of the SEMS organization, working together in a coordinated effort to facilitate decisions for overall emergency response activities, including the sharing of critical resources and the prioritization of incidents.

Multi-Agency Incident (SEMS)

An incident where one or more agencies assist a jurisdictional agency or agencies. The incident may be managed under single or unified command.

Multi-Jurisdiction Incident (SEMS)
An incident requiring action from multiple agencies that have a statutory responsibility for incident mitigation. In ICS, these incidents will be managed under a Unified Command.

Mutual Aid Coordinator (SEMS)
An individual at local government, operational area, region, or state level that is responsible to coordinate the process of requesting, obtaining, processing, and using mutual aid resources. Mutual Aid Coordinator duties will vary depending upon the mutual aid system.

Mutual Aid Region (OES)
A subdivision of the state emergency services organization, established to promote coordination of mutual aid and other emergency operations within an area of the state consisting of two or more counties. The State of California is currently divided into six Office of Emergency Services' mutual aid regions which coordinate and support local emergency operations at the request of local or operational area emergency coordinators. Through this system, the Governor's Office receives a constant flow of information from every geographic and organizational area of the state.

Mutual Aid Staging Area (OES)
A temporary facility established by the State Office of Emergency Services within or near affected areas. It may be supported by mobile communications and personnel provided by field or headquarters staff from state agencies, as well as personnel from local jurisdictions throughout the state.

- O -

Office of Emergency Services (SEMS)
The Governor's Office of Emergency Services.

Operational Area (SEMS)
An intermediate level of the state emergency organization, consisting of a county and all political subdivisions within the county area.

Operational Period (SEMS)
The period of time scheduled for execution of a given set of operation actions as specified in the Incident or EOC Action Plan. Operational Periods can be of various lengths, although usually not over 24 hours.

Operations Section (SEMS)
One of the five primary functions found at all SEMS levels. The Section responsible for all tactical operations at the incident, or for the coordination of operational activities at an EOC. The

Operations Section at the SEMS Field Response level can include Branches, Division and/or Groups, Task Forces, Teams, Single Resources, and Staging Areas. At the EOC levels, the Operations Section would contain Branches or Divisions, as necessary, because of span of control considerations.

Out-of-Service Resources (SEMS)
Resources assigned to an incident, but unable to respond for mechanical, rest, or personnel reasons.

- P -

Planning Meeting (SEMS)
A meeting held, as needed, throughout the duration of an incident to select specific strategies and tactics for incident control operations and for service and support planning. On larger incidents, the planning meeting is a major element in the development of the Incident Action Plan or EOC Action Plan.

Planning Section Also referred to as Planning/Intelligence (SEMS)
One of the five primary functions found at all SEMS levels. Responsible for the collection, evaluation, and dissemination of information related to the incident or an emergency, and for the preparation and documentation of Incident or EOC Action Plans. The section also maintains information on the current and forecasted situation, and on the status of resources assigned to the incident. At the SEMS Field Response level, the Section will include the Situation, Resource, Documentation, and Demobilization Units, as well as Technical Specialists. Other units may be added at the EOC level.

Political Subdivision (OES)
Includes any city, city and county, county, district, or other local governmental agency or public agency authorized by law.

Procurement Unit (SEMS)
Functional unit within the Finance/Administration Section responsible for financial matters involving vendor contracts.

Protection Factor - PF (OES)
A number used to express the relationship between the amount of fallout (gamma radiation) that would be received by an unprotected person and the amount that would be received by a person in a shelter.

Public Information Officer - PIO (SEMS)
The individual at field or EOC level that has been delegated the authority to prepare public information releases and to interact with the media. Duties will vary depending upon the agency and SEMS level.

- R -

Radioactive Fallout (OES)
The process or phenomenon of radioactive particles falling back to the earth's surface from a cloud formed by a nuclear detonation. The term is also applied in a collective sense to the contaminated particulate matter itself.

Radiological Operations (OES)
The organized effort, warning, detection, and preventive and remedial measures to minimize the effect of nuclear radiation on people and resources.

Radiological Officer - RO (OES)
A person assigned to the city and county Emergency Management Team who is responsible for monitoring radiological operations. The RO is the principal advisor to the Emergency Services Director and other officials on matters pertaining to radiological operations.

Radiological Monitors - RM (OES)
City and county staff trained to measure, record, and report radiation exposure and exposure rates; provide limited field guidance on radiation hazards associated with operations to which he/she is assigned; and perform operator's checks and maintenance on radiological instruments.

Reception and Care Center (OES)
A facility established in a reception area to receive and process incoming relocatees, assign them to lodging facilities, and provide them with information on feeding, medical care, and other essential services.

Reception Area (OES)
An area that, because of a hazard analysis and related preparedness planning, is pre-designated to receive and care for (or provide basic needs for) people displaced from a hazard area.

Example: A location at the periphery of a dam failure inundation area that can accommodate evacuated people if needed.

Recorders (SEMS)
Individuals within the SEMS organization who are responsible for recording information. Recorders may be found in Planning/Intelligence, Logistics, and Finance/Administration Units.

Regional Emergency Operations Center - REOC (SEMS)
Facilities found at State OES Administrative Regions. REOCs are used to coordinate information and resources among operational areas and between the operational areas and the state level.

Reporting Locations (SEMS)

Specific locations or facilities where incoming resources can check in at the incident. (See Check-in.)

Resources (SEMS)
Personnel and equipment available, or potentially available, for assignment to incidents or to EOCs. Resources are described by kind and type, and may be used in tactical support or supervisory capacities at an incident or at EOCs.

- S -

Safety Officer (SEMS)
A member of the Command Staff at the incident or within an EOC responsible for monitoring and assessing safety hazards or unsafe situations, and for developing measures for ensuring personnel safety. The Safety Officer may have assistants.

Search (OES)
Systematic investigation of an area or premises to determine the presence and/or location of people entrapped, injured, immobilized, or missing.

Section (SEMS)
That organization level with responsibility for a major functional area of the incident or at an EOC, e.g., Operations, Planning/Intelligence, Logistics, Administration/Finance.

Section Chief (SEMS)
The ICS title for individuals responsible for command of functional sections: Operations, Planning/Intelligence, Logistics, and Administration/Finance. At the EOC level, the position title will be Section Coordinator.

Sensitive Facilities (OES)
Facilities in reception areas that will not normally be used as lodging facilities for relocatees. These facilities are either considered unsuitable or are required for essential activities (food establishments, fire stations, banks, radio stations, service stations, etc.). But, if any of these facilities provide adequate protection against radioactive fallout, they may be used as fallout shelters.

Shelter Complex (OES)
A geographical grouping of facilities to be used for fallout shelters when such an arrangement serves planning, administrative, and/or operational purposes. Normally, a complex will include a maximum of 25 individual shelter facilities, within a diameter of about 1/2 mile.

Shelter In Place (OES)
Request by local health, law, fire, or other emergency services officials to stay indoors because of a hazardous situation in the area. Residents are instructed to close doors and windows to the

outside, close fireplace dampers, turn off heater and air fans, and place wet towels at bottom of doors.

Shelter Manager (OES)
An individual who provides for the internal organization, administration, and operation of a shelter facility.

Single Resource (SEMS)
An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.

Span of Control (SEMS)
The supervisory ratio maintained within an ICS or EOC organization. A span of control of five positions reporting to one supervisor is considered optimum.

Special District (SEMS)
A unit of local government (other than a city, county, or city and county) with authority or responsibility to own, operate, or maintain a project (as defined in California Code of Regulations 2900(s)) for purposes of natural disaster assistance. This may include a joint powers authority established under Section 6500 et seq. of the Code.

Staging Area (SEMS)
Staging Areas are locations set up at an incident where resources can be placed while awaiting a tactical assignment. Staging Areas are managed by the Operations Section.

Staging Area Managers (SEMS)
Individuals within ICS organizational units that are assigned specific managerial responsibilities at Staging Areas. (Also Camp Manager.)

Standard Operating Procedures - SOP (OES)
A set of instructions having the force of a directive, covering those features of operations that lend themselves to a definite or standardized procedure without loss of effectiveness.

Standardized Emergency Management System - SEMS (SEMS)
A system required by California Government Code for managing response to multi-agency and multi-jurisdiction emergencies in California. SEMS consists of five organizational levels which are activated as necessary: Field Response, Local Government, Operational Area, Region, and State.

State Coordinating Officer - SCO (Federal)
The person appointed by the Governor to act for the state in cooperation with the Federal Coordinating Officer.

State Emergency Plan (OES)

The State of California Emergency Plan as approved by the Governor.

State of Emergency (OES)
A statement by the Governor that proclaims the existence of a situation of extreme peril to the safety of people and/or property within the state. These conditions are likely to exceed the local capability to control it without outside mutual aid assistance through the mutual aid regions to combat the disaster. For this proclamation, the disaster situation can be caused by air pollution, fire, flood, storm, epidemic, riot, earthquake or other conditions, except situations resulting from a labor controversy or "State of War Emergency."

State of War Emergency (OES)
The condition that exists immediately, with or without a proclamation by the Governor, whenever the state or nation is attacked by an enemy of the United States, or upon the receipt by the state of a warning from the federal government that such an enemy attack is probable or imminent.

State Operations Center - SOC (OES)
An EOC established by the State Office of Emergency Services Headquarters to coordinate and support state operations within a disaster area. From this location, SOC staff control the response efforts of state and federal agencies that are supporting local government operations.

(SEMS): An EOC facility operated by the Governor's Office of Emergency Services at the state level in SEMS.

Stay-Put (OES)
A resident in a hazardous or potentially hazardous area who refuses to relocate during a directed relocation, or who is too ill or infirm to be evacuated.

Strategy (SEMS)
The general plan or direction selected to accomplish incident or EOC objectives.

Supporting Materials (SEMS)
Refers to the several attachments that may be included with an Incident Action Plan, e.g., communications plan, map, safety plan, traffic plan, and medical plan.

- T -

Tactical Direction (SEMS)
Direction given by the Operations Section Chief at the SEMS Field level which includes the tactics appropriate for the selected strategy, the selection and assignment of resources, tactics implementation, and performance monitoring for each operational period.

Task Force (SEMS)
A combination of single resources assembled for a particular tactical need, with common communications and a leader.

Team (SEMS)
(See Single Resource.)

Technical Specialists (SEMS)
Personnel with special skills that can be used anywhere within the ICS or EOC organization.

Traffic Control Points - TCP (OES)
Places along routes that are staffed by emergency personnel to direct and control the flow of traffic.

- U -

Unified Area Command (SEMS)
A Unified Area Command is established when incidents under an Area Command are multi-jurisdictional. (See Area Command and Unified Command.)

Unified Command (SEMS)
In ICS, Unified Command is a unified team effort which allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.

Unit (SEMS)
An organizational element having functional responsibility. Units are commonly used in incident Planning/Intelligence, Logistics, or Finance/Administration sections and can be used in operations for some applications. Units are also found in EOC organizations.

Unity of Command (SEMS)
The concept by which each person within an organization reports to one and only one designated person.

Utilities Branch (SEMS)
The organizational unit located within the Operations Section of all SEMS levels. It is activated, when needed, to address utility related issues associated with an emergency or disaster. At the regional and state levels of SEMS, the Branch is managed by State OES and staffed by members of the California Utilities Emergency Association (CUEA). Public and private water utilities in areas affected by an emergency are encouraged to communicate with the Utilities Branch at the appropriate levels of SEMS regarding damage assessments, emergency status, response and recovery support, and information needs.

- V -

Volunteers (OES)
Individuals who make themselves available for assignment during an emergency. These people may or may not have particular skills needed during emergencies and may or may not be part of a previously organized group.

EXAMPLE PRE-INCIDENT PLANNING CHECKLIST

INSPECT THE PHYSICAL FACILITIES AND REVIEW EMERGENCY AUTHORIZATIONS

- ❑ Inspect the pumping station and distribution facility. Can they be relied upon to keep operating during an emergency?
- ❑ Check the water pressure at pumping stations and hydrants. Can it be maintained in an emergency?
- ❑ Be sure the water reserve levels and alternative emergency power, such as onsite backup generators and portable generators, are sufficient for an emergency.
- ❑ Identify the components of the system that would be most susceptible to damage in an earthquake or other disaster. If possible, make modifications that will strengthen them. Examples:
  - ❑ Underground excavated-type reservoirs with column support roofing could suffer extensive roof collapse.
  - ❑ Distribution storage, especially tanks without flexible couplings, could have significant damage, primarily at connections.
  - ❑ Mains constructed of cast iron or asbestos cement pipe are susceptible to breakage if near the epicenter of an earthquake or in areas subject to soil liquefaction.
  - ❑ Various elements of the communication system, such as emergency power, base station, and remote sites, are highly vulnerable to damage.
- ❑ Be sure that the utility's board of directors or city council has taken the appropriate action to give emergency managers authority to act in an emergency.
- ❑ Photograph key components of the system so "before and after" pictures support claims for reimbursement.

MAKE CONTACT WITH AGENCIES THAT CAN HELP

- ❑ Make contact with the hospitals and ambulance services in work areas and, with them, develop the information needed for contacting them in an emergency. Also, find out which medical facilities have a critical need for water and be sure the emergency response plan makes provision for supplying them.
- ❑ Make contact with the local fire fighting and law enforcement agencies on how to reach them in an emergency.
- ❑ Locate possible emergency water supplies and how to make contact with the suppliers by phone, radio communication, or other equally rapid means.
- ❑ With nearby water agencies, work out an agreement to provide mutual aid or assistance following a disaster. Record the name of each of these agencies, the provisions of each agreement, and how each agency can be contacted in an emergency.
- ❑ Work with the other utilities (all utilities, not just water) to establish working relationships to be used during an emergency.
- ❑ Make a list of the news media. Include radio, TV, and newspapers in the area, and contact each to develop contacts for providing necessary information to the public.

- ❑ Designate a location or locations for an emergency operation center and make provision to equip it with the supplies, equipment, and facilities that will be needed in an emergency.
- ❑ Coordinate with governmental agencies for emergency health and safety protection, and technical, legal, and financial assistance. Record contact numbers for designated personnel.
- ❑ Coordinate with the local Office of Emergency Services on the establishment of an appropriate emergency response and recovery plan, including a mutual aid plan.
- ❑ Revise and review the emergency plan in conjunction with related agencies, including, but not limited to, the local fire department and OES, to ensure that the plan is sufficient to address possible disaster scenarios.

MAKE ASSIGNMENTS FOR STAFF

- ❑ Make an emergency personnel roster with home addresses and phone numbers.
- ❑ Plan the assignments for emergency personnel with a clear chain of command and responsibilities. Make sure staff know and are trained for their assignments. It is suggested that those employees who are considered to be emergency response personnel carry authorized photo identification for access to restricted areas.
- ❑ Establish a damage inspection team with staff members familiar with the operation of the system to inspect it immediately following a disaster, identify damaged facilities, and report their findings.
- ❑ Designate a disaster recovery coordinator to document emergency work performed following a disaster and to submit the appropriate documents for reimbursement under existing legislation.
- ❑ Assign responsible personnel to the emergency operations center, keeping a record of their names, addresses, and phone numbers. Keep in mind that, as personnel change, new assignments must be made.

INVENTORY MATERIALS AND EQUIPMENT

- ❑ Make a list of the supplies and equipment that might be needed following a disaster and determine what is available within the utility, what is available from neighboring agencies, and what would have to be obtained from commercial suppliers.
- ❑ Collect maps, diagrams, and necessary information on resources under normal operations, such as resources sources, transmission, storage, booster capacities, treatment capacities, and power sources.
- ❑ Determine the vehicles that would be needed in time of disaster, where they are stored, and the alternative routes that can be taken to get into all parts of the system.
- ❑ Establish and maintain a reliable communications system. List information on what it is, how to use it, what its capabilities are, and if possible, what back-up system is available. If the amateur radio community is needed to provide additional support communications, contact the local county emergency services organization to get details on the RACES program.

- ❑ Analyze logistics on emergency supply activation and repairs. Keep a record of the analysis readily available.

8607. Standardized Emergency Management System:

(a) By December 1, 1993, the Office of Emergency Services, in coordination with all interested state agencies with designated response roles in the state emergency plan and interested local emergency management agencies shall jointly establish by regulation a standardized emergency management system for use by all emergency response agencies. The public water systems identified in Section 8607.2 may review and comment on these regulations prior to adoption. This system shall be applicable, but not limited to, those emergencies or disasters referenced in the state emergency plan. The standardized emergency management system shall include all of the following systems as a framework for responding to and managing emergencies and disasters involving multiple jurisdictions or multiple agency responses:

(1) The Incident Command Systems adapted from the systems originally developed by the FIRESCOPE Program, including those currently in use by state agencies.

(2) The multi-agency coordination system as developed by the FIRESCOPE Program.

(3) The mutual aid agreement, as defined in Section 8561, and related mutual aid systems such as those used in law enforcement, fire service, and coroner's operations.

(4) The operational area concept, as defined in Section 8559.

(b) Individual agencies' roles and responsibilities agreed upon and contained in existing laws or the state emergency plan are not superseded by this article.

(c) By December 1, 1994, the Office of Emergency Services, in coordination with the State Fire Marshal's Office, the Department of the California Highway Patrol, the Commission on Peace Officer Standards and Training, the Emergency Medical Services Authority, and all other interested state agencies with designated response roles in the state emergency plan, shall jointly develop an approved course of instruction for use in training all emergency response personnel, consisting of the concepts and procedures associated with the standardized emergency management system described in subdivision (a).

(d) By December 1, 1996, all state agencies shall use the standardized emergency management system as adopted pursuant to subdivision (a), to coordinate multiple jurisdiction or multiple agency emergency and disaster operations.

(e) (1) By December 1, 1996, each local agency, in order to be eligible for any funding of response-related costs under disaster assistance programs, shall use the standardized

emergency management system as adopted pursuant to subdivision (a) to coordinate multiple jurisdiction or multiple agency operations.

(2) Notwithstanding paragraph (1), local agencies shall be eligible for repair, renovation, or any other non-personnel costs resulting from an emergency.

(f) The office shall, in cooperation with involved state and local agencies, complete an after-action report within 120 days after each declared disaster. This report shall review public safety response and disaster recovery activities and shall be made available to all interested public safety and emergency management organizations.

8607.1 Legislative intent:

(a) It is the intent of the Legislature that a statewide system for fire hydrants be adopted so that all firefighters can respond to emergencies calling for the use of water at any location in the State of California. Without this statewide standardized system, the lives of firefighters and those they serve would be put in serious jeopardy in a mutual aid fire response effort stretching across city and county boundaries.

(b) By January 1, 1994, the State Fire Marshal shall establish a statewide uniform color coding of fire hydrants. In determining the color coding of fire hydrants, the State Fire Marshal shall consider the national system of coding developed by the National Fire Protection Association as Standard 291 in Chapter 2 on Fire Flow testing and marking of Hydrants. The uniform color coding shall not preempt local agencies from adding additional markings.

(c) Compliance with the uniform color coding requirements of subdivision (b) shall be undertaken by each agency that currently maintains fire hydrants throughout the state as part of its ongoing maintenance program for its fire hydrants.

(d) By July 1, 1994, the State Fire Marshal shall develop and adopt regulations establishing statewide uniform fire hydrant coupling sizes. The regulations adopted pursuant to this section shall include provisions that permit the use of an adapter mounted on the hydrant as a means of achieving uniformity. In determining uniform fire hydrant coupling sizes, the State Fire Marshal shall consider any system developed by the National Fire Protection Association, the National Fire Academy, or the Federal Emergency Management Agency.

(e) By December 1, 1996, each local agency, city, county, city and county, or special district in order to be eligible for any funding of mutual aid fire response related costs under disaster assistance programs, shall comply with regulations adopted pursuant to this section. Compliance may be met if at least one coupling on the hydrant is of the uniform size.

(f) Subdivision (d) shall not be applicable to the City and County of San Francisco due to the existing water system.

8607.2 Plans:

(a) All public water systems, as defined in subdivision (f) of Section 4010.1 of the Health and Safety Code, with 10,000 or more service connections shall review and revise their disaster preparedness plans in conjunction with related agencies, including, but not limited to, local fire departments and the office to ensure that the plans are sufficient to address possible disaster scenarios. These plans should examine and review pumping station and distribution facility operations during an emergency, water pressure at both pumping stations and hydrants, and whether there is sufficient water reserve levels and alternative emergency power such as onsite backup generators and portable generators.

(b) All public water systems, as defined in subdivision (f) of Section 4010.1 of the Health and Safety Code, with 10,000 or more service connections following a declared state of emergency shall furnish an assessment of their emergency response and recommendations to the Legislature within six months after each disaster, as well as implementing the recommendations in a timely manner.

(c) By December 1, 1996, the Office of Emergency Services shall establish appropriate and insofar as practical, emergency response and recovery plans, including mutual aid plans, in coordination with public water systems, as defined in subdivision (f) of Section 4010.1 of the Health and Safety Code, with 10,000 or more service connections.

CALIFORNIA CODE OF REGULATIONS
TITLE 19
DIVISION 2
OFFICE OF EMERGENCY SERVICES

CHAPTER 1

Article 1. Short Title

§ 2400. Short Title.

This Chapter shall be known and may be cited as the Standardized Emergency Management System (SEMS) Regulations.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607

Article 2. Purpose and Scope

§2401. Purpose and Scope.

These regulations establish the Standardized Emergency Management System (SEMS) based upon the Incident Command System (ICS) adapted from the system originally developed by the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program including those currently in use by state agencies, the Multi-Agency Coordination System (MACS) as developed by FIRESCOPE program, the operational area concept, and the Master Mutual Aid Agreement and related mutual aid systems.

SEMS is intended to standardize response to emergencies involving multiple jurisdictions or multiple agencies. SEMS is intended to be flexible and adaptable to the needs of all emergency responders in California. SEMS requires emergency response agencies use basic principles and components of emergency management including ICS, multi-agency or inter-agency coordination, the operational area concept, and established mutual aid systems. State agencies must use SEMS. Local government must use SEMS by December 1, 1996 in order to be eligible for state funding of response-related personnel costs pursuant to activities identified in California Code of Regulations, Title 19, §2920, §2925, and §2930. Individual agencies' roles and responsibilities contained in existing laws or the state emergency plan are not superseded by these regulations.

Note: AUTHORITY: GOVERNMENT CODE §8607(a), §8607(b)
REFERENCE: GOVERNMENT CODE §8607, HEALTH AND SAFETY CODE §13071, §13072

Article 3. Definitions

§2402. Definitions.

(a) "Action Plan" means the plan prepared in the EOC containing the emergency response objectives of that SEMS level reflecting overall priorities and supporting activities for a designated period. The plan is shared with supporting agencies.

(b) "Activate" means, at a minimum, a designated official of the emergency response agency implements SEMS as appropriate to the scope of the emergency and the agency's role in response to the emergency.

(c) "Department Operations Center" means an EOC used by a distinct discipline, such as fire, medical, hazardous material, or a unit such as Department of Public Works, Department of Health, or local water district. Department operations centers may be used at all SEMS levels above the field response level depending upon the impacts of the emergency.

(d) "Disaster Assistance Program" is a program that provides state funding or reimbursement for local government response-related personnel costs incurred in response to an incident as defined in Section 2402(i).

(e) "Emergency" means a condition of disaster or of extreme peril to the safety of persons and property within the state caused by such conditions as air pollution, fire, flood, hazardous material incident, storm, epidemic, riot, drought, sudden and severe energy shortage, plant or animal infestations or disease, the Governor's warning of an earthquake or volcanic prediction, or an earthquake or other conditions, other than conditions resulting from a labor controversy.

(f) “Emergency Operations Center” means a location from which centralized emergency management can be performed.

(g) "Emergency Response Agency” means any organization responding to an emergency, whether in the field, at the scene of an incident, or to an EOC, in response to an emergency, or providing mutual aid support to such an organization.

(h) "Emergency Response Personnel" means personnel involved with an agency's response to an emergency.

(i) “Incident” means an occurrence or event, either human-caused or by natural phenomena, that requires action by emergency response personnel to prevent or minimize loss of life or damage to property and/or natural resources.

(j) "Incident Action Plan" means the plan developed at the field response level which contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written.

(k) “Incident Commander” means the individual responsible for the command of all functions at the field response level.

(l) “Incident Command System (ICS)” means a nationally used standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, with responsibility for the management of resources to effectively accomplish stated objectives pertinent to an incident.

(m) "Local Government" means local agencies as defined in Government Code §8680.2 and special districts as defined in California Code of Regulations, Title19, Division 2, Chapter 5, NDAA, §2900(y).

(n) "Multi-agency or inter-agency coordination" means the participation of agencies and disciplines involved at any level of the SEMS organization working together in a coordinated effort to facilitate decisions for overall emergency response activities, including the sharing of critical resources and the prioritization of incidents.

(o) "Office of Emergency Services" means the Governor's Office of Emergency Services.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607, §8680.2, §8558(c)

Article 4. Standardized Emergency Management System

§2403. SEMS Organizational Levels and Functions.

(a) All emergency response agencies shall use the Standardized Emergency Management System in responding to, managing, and coordinating multiple agency or multiple jurisdiction incidents, whether single or multiple discipline.

(b) There are five designated levels in the SEMS organization: field response, local government, operational area, regional, and state. Each level is activated as needed.

(1) "Field response level" commands emergency response personnel and resources to carry out tactical decisions and activities in direct response to an incident or threat.

(2) "Local government level" manages and coordinates the overall emergency response and recovery activities within their jurisdiction.

(3) "Operational area level" manages and/or coordinates information, resources, and priorities among local governments within the operational area and serves as the coordination and communication link between the local government level and the regional level.

(4) "Regional level" manages and coordinates information and resources among operational areas within the mutual aid region designated pursuant to Government Code §8600 and between the operational areas and the state level. This level along with the state level coordinates overall state agency support for emergency response activities.

(5) "State level" manages state resources in response to the emergency needs of the other levels, manages and coordinates mutual aid among the mutual aid regions and between the regional level and state level, and serves as the coordination and communication link with the federal disaster response system.

(c) Local government, operational area, regional, and state levels shall provide for all of the following functions within SEMS: management, operations, planning/intelligence, logistics, and finance/administration.

(1) Management is responsible for overall emergency policy and coordination through the joint efforts of governmental agencies and private organizations.

(2) Operations is responsible for coordinating all jurisdictional operations in support of the response to the emergency through implementation of the organizational level's action plan.

(3) Planning/Intelligence is responsible for collecting, evaluating, and disseminating information; developing the organizational level's action plan in coordination with the other functions; and maintaining documentation.

(4) Logistics is responsible for providing facilities, services, personnel, equipment, and materials.

(5) Finance/Administration is responsible for financial activities and administrative aspects not assigned to the other functions.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607, §8559, §8605, §8600

§2405. Field Response Level.

(a) Emergency response agencies operating at the field response level of an incident shall utilize the Incident Command System, incorporating the functions, principles and components of ICS.

(1) The functions of ICS are command, operations, planning, logistics and finance.

(A) Command is the directing, ordering, and/or controlling of resources by virtue of explicit legal, agency, or delegated authority.

(B) Operations is responsible for the coordinated tactical response of all field operations directly applicable to or in support of the mission(s) in accordance with the Incident Action Plan.

(C) Planning (may be referred to as planning/intelligence) is responsible for the collection, evaluation, documentation, and use of information about the development of the incident and the status of resources.

(D) Logistics is responsible for providing facilities, services, personnel, equipment, and materials in support of the incident.

(E) Finance (may be referred to as finance/administration) is responsible for all financial and cost analysis aspects of the incident, and for any administrative aspects not handled by the other functions.

(2) The principles of ICS are that:

(A) The system provides for the following kinds of operation: single jurisdictional responsibility/single agency involvement, single jurisdictional responsibility with multiple-agency involvement, and multiple-jurisdictional responsibility with multiple-agency involvement.

(B) The system's organizational structure adapts to any emergency or incident to which emergency response agencies would be expected to respond.

(C) The system shall be applicable and acceptable to all user agencies.

(D) The system is readily adaptable to new technology.

(E) The system expands in a rapid and logical manner from an initial response into a major incident and contracts just as rapidly as organizational needs of the situation decrease.

(F) The system has basic common elements in organization, terminology and procedures.

(3) The components of ICS are common terminology, modular organization, unified command structure, consolidated action plans, manageable span-of-control, predesignated incident facilities, comprehensive resource management, and integrated communications.

(A) Common terminology is the established common titles for organizational functions, resources, and facilities within ICS.

(B) Modular organization is the method by which the ICS organizational structure develops based upon the kind and size of an incident. The organization's staff builds from the top down with responsibility and performance placed initially with the Incident Commander. As the need exists, operations, planning, logistics, and finance may be organized as separate sections, each with several units.

(C) Unified command structure is a unified team effort which allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, autonomy, responsibility or accountability.

(D) Consolidated action plans identify objectives and strategy determinations made by the Incident Commander for the incident based upon the requirements of the jurisdiction. In the case of a unified command, the incident objectives must adequately reflect the policy and needs of all the jurisdictional agencies. The action plan for the incident covers the tactical and support activities required for the operational period.

(E) Manageable span-of-control within ICS is a limitation on the number of emergency response personnel who can effectively be supervised or directed by an individual supervisor. The kind of incident, the nature of the response or task, distance, and safety will influence the span of control range. The ordinary span-of-control range is between three and seven personnel.

(F) Predesignated incident facilities are identified within ICS. The determination of the kinds and locations of facilities to be used will be based upon the requirements of the incident.

(G) Comprehensive resource management is the identification, grouping, assignment and tracking of resources.

(H) Integrated communications are managed through the use of a common communications plan and an incident-based communications center established for the use of tactical and support resources assigned to the incident.

(b) Where an agency has jurisdiction over multiple-agency incidents, it shall organize the field response using ICS to provide for coordinated decision-making with emergency response agencies.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a)(1), §8607(e), HEALTH AND SAFETY CODE §13071, §13072

§ 2407. Local Government Level.

(a) The Standardized Emergency Management System as described under SEMS Organizational Levels and Functions (§2403) shall be utilized:

(1) when the local government emergency operations center is activated.

(2) when a local emergency, as defined in Government Code §8558(c), is declared or proclaimed.

(b) When a local government EOC is activated, communications and coordination shall be established between the Incident Commander(s) and the department operations center(s) to the EOC or between the Incident Commander(s) and the EOC. Coordination of fire and law enforcement resources shall be accomplished through their respective mutual aid systems.

(c) Communications and coordination shall be established between a local government EOC, when activated, and any state or local emergency response agency having jurisdiction at an incident occurring within that local government's boundaries.

(d) Local government shall use multi-agency or inter-agency coordination to facilitate decisions for overall local government level emergency response activities.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8558(c), §8607(a), §8607(e)

§ 2409. Operational Area Level.

(a) "Operational Area Level" means an intermediate level of the state emergency services organization, consisting of a county and all political subdivisions within the county area. Each county geographic area is designated as an operational area. An operational area is used by the county and the political subdivisions comprising the operational area for the coordination of emergency activities and to serve as a link in the system of communications and coordination between the state's emergency operation centers and the operation centers of the political subdivisions comprising the operational area, as defined in Government Code §8559(b) & §8605. This definition does not change the definition of operational area as used in the existing fire and rescue mutual aid system.

(b) All local governments within a county geographic area shall be organized into a single operational area by December 1, 1995, and the county board of supervisors shall be responsible for its establishment.

(c) The operational area authority and responsibility under SEMS shall not be affected by non-participation of any local government(s) within the operational area.

(d) The county government shall serve as the lead agency of the operational area unless another member agency of the operational area assumes that responsibility by written agreement with county government.

(e) The lead agency of the operational area shall:

(1) Coordinate information, resources and priorities among the local governments within the operational area.

(2) Coordinate information, resources and priorities between the regional level and the local government level. Coordination of fire and law enforcement resources shall be accomplished through their respective mutual aid systems.

(3) Use multi-agency or inter-agency coordination to facilitate decisions for overall operational area level emergency response activities.

(f) The operational area EOC shall be activated and SEMS used as described in the SEMS Organizational Levels and Functions (§2403) when any of the following conditions exists:

(1) A local government within the operational area has activated its EOC and requested activation of the operational area EOC to support their emergency operations.

(2) Two or more cities within the operational area have declared or proclaimed a local emergency.

(3) The county and one or more cities have declared or proclaimed a local emergency.

(4) A city, city and county, or county has requested a governor's proclamation of a state of emergency, as defined in Government Code §8558(b).

(5) A state of emergency is proclaimed by the governor for the county or two or more cities within the operational area.

(6) The operational area is requesting resources from outside its boundaries, except those resources used in normal day-to-day operations which are obtained through existing agreements providing for the exchange or furnishing of certain types of facilities and services on a reimbursable, exchange, or other basis as provided for under the Master Mutual Aid Agreement.

(7) The operational area has received resource requests from outside its boundaries, except those resources used in normal day-to-day operations which are obtained through existing agreements providing for the exchange or furnishing of certain types of facilities and services on a reimbursable, exchange, or other basis as provided for under the Master Mutual Aid Agreement.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)

REFERENCE: GOVERNMENT CODE §8607(a), §8558(c), §8559(b), §8605, §8561, §8616, §8617, §8618

§ 2411. Regional Level.

(a) The regional level EOC shall be activated and SEMS used as described in SEMS Organizational Levels and Functions (§2403) when any operational area EOC within the mutual aid region is activated.

(b) The lead agency for establishment of the regional level EOC shall be OES.

(c) The location of the regional level EOC shall be identified by OES to accommodate the needs of the operational area(s) served.

(d) When the regional level EOC is activated, communications and coordination shall be established with the operational area(s), the state level EOC, and regional level department operations centers. Coordination of fire and law enforcement resources shall be accomplished through their respective mutual aid systems.

(e) The regional level shall use multi-agency or inter-agency coordination to facilitate decisions for overall regional level emergency response activities.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a), §8600, §8559(a)

§ 2413. State Level.

(a) The state level EOC shall be activated and SEMS used as described in SEMS Organizational Levels and Functions (§2403) when any of the following conditions exists:

(1) A regional level EOC is activated.

(2) Upon the governor's proclamation of a state of emergency.

(3) Upon the governor's proclamation of an earthquake or volcanic prediction.

(b) The lead agency for establishment of the state level EOC shall be OES.

(c) When the state level EOC is activated, communications and coordination shall be established with the regional level EOC(s), state level department operations centers, and federal emergency response agencies. Coordination of fire and law enforcement resources shall be accomplished through their respective mutual aid systems.

(d) The state level shall use multi-agency or inter-agency coordination to facilitate decisions for overall state level emergency response activities.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a), §8558(b)

§2415. Mutual Aid.

(a) "Mutual Aid" means voluntary aid and assistance by the provision of services and facilities, including but not limited to: fire, police, medical and health, communication, transportation, and utilities. Mutual aid is intended to provide adequate resources, facilities, and other support to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

(b) "Mutual Aid System" means the system which allows for the progressive mobilization of resources to/from emergency response agencies, local governments, operational areas, regions, and the state with the intent of providing adequate resources to requesting agencies. The California mutual aid system includes several discipline-specific mutual aid systems (e.g., fire and rescue, law enforcement, medical and public works) which are consistent with the Master Mutual Aid Agreement.

(c) All mutual aid systems and agreements shall be consistent with SEMS and the Master Mutual Aid Agreement.

(d) Unless otherwise provided by agreement, the responsible local official in whose jurisdiction(s) an incident requiring mutual aid has occurred remains in charge and retains overall direction of personnel and equipment provided through mutual aid (as provided for in Government Code §8618).

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a)(3), §8561, §8616, §8617, §8618

Article 5. Standardized Emergency Management System Advisory Board

§ 2425. Establishment and Purpose.

The Director, OES, shall establish the SEMS Advisory Board consisting of representatives from emergency response agencies to provide advice on all aspects of this Chapter.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a), §8587

Article 6. Training

§2428. Minimum Performance Objectives.

(a) Emergency response agencies shall determine the appropriate level(s) of SEMS instruction for each member of their staff, based upon the staff member's potential assignment during an emergency response.

(b) Emergency response agencies shall ensure that their emergency response personnel can demonstrate and maintain, to the level deemed appropriate, the minimum SEMS performance objectives required by their agencies' training programs. Agencies shall use the Minimum Performance Objectives contained in the Approved Course of Instruction (ACI) Syllabus dated March 1, 1995, which are hereby incorporated by reference, as the basis for their training programs. Minimum Performance Objectives are contained in Paragraph D of each Course Module description.

(c) SEMS minimum performance objectives shall be met through completion of materials from the ACI, completion of equivalent courses of instruction, or through incorporation of the objectives into exercises.

Note: AUTHORITY: GOVERNMENT CODE § 8607(a)
REFERENCE: GOVERNMENT CODE § 8607(a) and §8607(e)

Article 7. Compliance

§2443. General Provisions.

(a) Local government must use SEMS in order to be eligible for state funding of response-related personnel costs occurring in response to an incident as defined in §2402 (i). All state agencies shall use SEMS to coordinate multiple jurisdiction or multiple agency emergency and disaster operations.

(b) Compliance with SEMS shall be documented in the areas of planning, training, exercises, and performance.

(c) All applicants for reimbursement of response-related personnel costs shall self-certify compliance with §2445, 2446, 2447, and 2448. This self-certification shall be submitted in writing with the application.

(d) Evidence of compliance with SEMS as set forth in §2445, 2446, 2447, and 2448 shall be available for review.

(e) When the OES Director determines sufficient evidence exists to warrant a SEMS Compliance review, a Review Team shall be established to evaluate the compliance with SEMS of any local government which has requested funding of its response-related personnel costs under disaster assistance programs, or any operational area or state agency. The OES Director shall notify the local government, operational area, or state agency being evaluated, the SEMS Advisory Board, and the fund(s) administrator of any disaster assistance program of the

establishment of the Review Team. At a minimum, participants on the Review Team shall include peers of the entity being evaluated, OES staff, and others knowledgeable in emergency operations and SEMS. The Review Team shall meet with the local government, operational area, or state agency being evaluated and solicit all pertinent information. The team may also review records and interview persons knowledgeable on the SEMS compliance activities of the entity being evaluated. The Review Team shall report its findings to the local government, operational area, or state agency that was evaluated, the SEMS Advisory Board, and the OES Director. This report must be issued within ninety (90) days of the establishment of the Review Team.

(f) The SEMS Advisory Board shall examine the Review Team's report within sixty (60) days of submittal of the report. The SEMS Advisory Board shall also consider additional information pertinent to the evaluation. The local government, operational area, or state agency being evaluated may submit additional information to the Board, either verbally or in writing. After consideration, the SEMS Advisory Board shall submit a recommendation to the OES Director. A copy of the recommendation shall be forwarded to the local government, operational area, or state agency being evaluated.

(g) The OES Director shall make a determination on whether or not the local government, operational area, or state agency being evaluated was in compliance with SEMS. This determination shall be forwarded to the local government, operational area, or state agency being evaluated by certified letter within thirty (30) days of the SEMS Advisory Board's recommendation. A copy of the determination shall be provided to the fund(s) administrator of any disaster assistance program.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(e), §8682.9, §8558(c)

§2444. Appeal Process.

(a) In the event the local government, operational area, or state agency being evaluated disagrees with the determination of the OES Director, the local government, operational area, or state agency may request a reconsideration of the determination. The request must be submitted within thirty (30) days of receipt of the letter of determination.

(b) The request for reconsideration shall be in writing and indicate why the local government, operational area, or state agency disagrees with the decision, any new or additional pertinent information, and any legal authority or other basis for the disagreement with the determination.

(c) The OES Director shall review the request for reconsideration and make a determination. The local government, operational area, or state agency that submitted the request for reconsideration shall be notified of the OES Director's decision by certified letter within thirty (30) days of receipt of the request for reconsideration. A copy of the determination shall be provided to the fund(s) administrator of any disaster assistance program.

(d) The OES Director's decision shall be considered final for the purposes of the appeal process.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(e)

§2445. Planning.

Local governments, operational areas, and state agencies shall include the use of SEMS in emergency plans and procedures pursuant to §2403, 2405, 2407, 2409, 2411, 2413 and 2415.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(a), §8607(b), §8607(c), §8607.2(c)

§2446. Training.

Local governments, operational areas, and state agencies shall document SEMS training provided to its emergency response personnel pursuant to §2428.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(c)

§2447. Exercises.

Local governments, operational areas, and state agencies shall incorporate the use of SEMS pursuant to §2403, 2405, 2407, 2409, 2411, 2413 and 2415 at all levels of operation when exercises are performed.

Note: AUTHORITY: GOVERNMENT CODE §8607(a), §8607.2(c)
REFERENCE: GOVERNMENT CODE §8607(c), §8607.2(c)

§2448. Performance.

Local governments, operational areas, and state agencies shall document the use of SEMS. Documentation shall include activities performed pursuant to §2403, 2405, 2407, 2409, 2411, 2413 and 2415 during the emergency.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(d)

Article 8. After Action Reports

§2450. Reporting Requirements.

(a) Any city, city and county, or county declaring a local emergency for which the governor proclaims a state of emergency, and any state agency responding to that emergency shall complete and transmit an after action report to OES within ninety (90) days of the close of the incident period as specified in California Code of Regulations, Title 19, §2900(j).

(b) The after action report shall, at a minimum, be a review of response actions taken, application of SEMS, suggested modifications to SEMS, necessary modifications to plans and procedures, identified training needs, and recovery activities to date.

Note: AUTHORITY: GOVERNMENT CODE §8607(a)
REFERENCE: GOVERNMENT CODE §8607(f)

EXAMPLE CHECKLISTS FOR A SEMS ORGANIZATION

MANAGEMENT SECTION

Emergency Operations Center Director Checklist

- ❑ Activate the EOC at designated location.
- ❑ Determine if EOC facility and support systems are fully functional.
- ❑ Determine status of internal and external communications systems.
- ❑ Ensure key functional positions for Operations, Planning/Intelligence, Logistics, and Finance/Administration are filled. Ensure staffing is adequate.
- ❑ Verify that everyone is briefed on the current situation.
- ❑ Determine if the activation level for the EOC is appropriate. If not, determine appropriate level.
- ❑ Based on known situation and objectives, determine appropriate length for the current operational planning period.
- ❑ Determine and list general priorities and objectives related to the emergency.
- ❑ Establish if there are critical resource shortfalls that should be monitored at EOC level.
- ❑ Instruct General Staff on guidance and direction to be issued to EOC support elements.
- ❑ Ensure that accurate and complete records are being maintained.
- ❑ Thoroughly brief relief as appropriate.
- ❑ Supervise deactivation of the EOC.

Liaison Officer Checklist

- ❑ Obtain briefing from the EOC Director.
- ❑ Determine whether communication problems exist in contacting external agencies. If so, provide information to the Communications Unit.
- ❑ Know the working locations for other Agency Representatives assigned to EOC.
- ❑ Brief other Agency Representatives on current situation, priorities, and action plan.
- ❑ Request Agency Representatives contact their agency, determine level of activation of agency facilities, and obtain intelligence or situation information that may be useful to the EOC.
- ❑ Compile list of other Agency Representatives (agency, name, EOC phone no.) and make this information available to all EOC staff.
- ❑ Provide periodic update briefings to other Agency Representatives as necessary.
- ❑ Release other Agency Representatives no longer required in the EOC after coordination with EOC Director and rest of the General Staff.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Maintain checklist for other agency representatives.

Other Agency Representatives Checklist

- ❑ Report to Liaison Officer or EOC Director and obtain a situation briefing.
- ❑ Establish communications link(s) with home agency. If unable to communicate, notify Communications Unit.
- ❑ Obtain EOC organization chart, floor plan, and telephone listing. Review the locations and general duties of all organizational units with the Liaison Officer.
- ❑ Clarify your decision-making authority with your agency.
- ❑ If relocating to work with an EOC function, advise the Liaison Officer of your location.
- ❑ Process requests for information that your agency can provide. (Resource requests should be processed through Logistics.)
- ❑ Keep up-to-date on resources and activities associated with your agency.
- ❑ Provide appropriate situation information to the Situation Assessment Unit and the Liaison Officer.
- ❑ Represent your agency at planning meetings as appropriate. Be prepared to provide update briefings about your agency's activities and priorities at these meetings.
- ❑ Periodically inform your agency on EOC priorities and actions that may be of interest.
- ❑ Maintain logs and files associated with your position.
- ❑ Provide a comprehensive briefing to your relief.
- ❑ Coordinate deactivation with the Liaison Officer. Ensure your agency's representation is no longer needed prior to leaving.

Public Information Officer Checklist

- ❑ Obtain briefing from EOC Director.
- ❑ Establish contact with the Situation Assessment Unit in the Planning/Intelligence Section and begin to compile information appropriate for public dissemination.
- ❑ Identify community-sensitive issues of primary concern to your utility.
- ❑ Coordinate with EOC Director on the content and timing of public information releases.
- ❑ Establish contact and provide on-going coordination with print and broadcast media.
- ❑ Assist in the development of materials for press briefings.
- ❑ Coordinate to ensure that common information and data is provided to and from all sources.
- ❑ Update news release material as the situation evolves.
- ❑ Provide copies of all releases to the EOC Director for approval.
- ❑ Keep the EOC Director advised of all unusual requests for information and of all critical or unfavorable media comments. Provide an estimate of the severity and impact of critical material, and make recommendations as appropriate.
- ❑ Adjust operations according to continuing need.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Establish new briefing area away from EOC (if necessary).

OPERATIONS SECTION

EOC Operations Section Chief Checklist

- ❑ Obtain briefing from the EOC Director.
- ❑ Determine the location and status of major incidents currently active.

- ❑ Obtain an estimate of damage to and operational capability of facilities/systems.
- ❑ Provide above information to the Situation Assessment Unit in the Planning/Intelligence Section.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.

PLANNING/INTELLIGENCE SECTION

Planning/Intelligence Section Chief Checklist

- ❑ Ensure that units within the Section have been activated, if necessary, and are adequately staffed.
- ❑ Interact with each unit in the Section to obtain information, assist in coordination between other EOC sections, and ensure that the proper flow of information is taking place.
- ❑ Run action planning meetings as necessary, deactivate units when called for by the EOC Director.

Situation Assessment Unit Chief Checklist

- ❑ Obtain briefing from the Planning/Intelligence Section Chief.
- ❑ Assign specific duties to support staff, and supervise staff.
- ❑ Maintain EOC situation displays.
- ❑ Determine status of communications systems.
- ❑ As appropriate to the situation, determine and display extent of damage to and operational capability of:
  - Compile displays of outages within the water distribution system area.
  - Major travel routes, including traffic flow through affected areas.
  - Other utilities within the water utility.
- ❑ Develop maps for the above information.
- ❑ Provide above information to other EOC personnel.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Keep the Planning/Intelligence Section Chief informed of all major situation developments as they become known.
- ❑ Be prepared to provide input to the After-Action Report.

Advance Planning Unit Chief Checklist

- ❑ Report to and obtain briefing from the Planning/Intelligence Section Chief.
- ❑ Obtain current briefing on the operational situation from the Situation Assessment Unit.
- ❑ Determine best estimate of duration of the situation from available information.
- ❑ Determine current priorities and policies from Planning/Intelligence Section Chief and/or EOC Director.

- ❑ Develop estimates of what the situation will likely be in 36 to 72 hours, given current direction and policy.
- ❑ Recommend top priorities for actions and resources.
- ❑ Identify any necessary changes to water utility policy to better address the situation.
- ❑ Identify any issues and constraints that should be addressed now, in light of the probable situation in 36 to 72 hours.
- ❑ Identify any special resource or communication needs for future use.
- ❑ Develop information displays, maps, etc., for the above, if appropriate.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Periodically evaluate the operational situation and assist Planning/Intelligence Section staff in making recommendations on priority response and recovery actions.
- ❑ Be prepared to provide input to the After-Action Report.

Documentation Unit Chief Checklist

- ❑ Report to and obtain briefing from Planning/Intelligence Section Chief.
- ❑ Check for adequate supplies at your work station.
- ❑ Determine, in consultation with the Planning/Intelligence Section Chief, what EOC materials should be collected for official records.
- ❑ Contact other EOC sections and units and inform them of the requirement to maintain official records. Assist them, as necessary, in setting up a file records system.
- ❑ Provide documentation and copying services for the EOC.
- ❑ Provide messengers, as needed, for use in support of EOC operations.
- ❑ Support the Situation Assessment Unit, as necessary, in posting of information.
- ❑ After planning meetings, assist in the preparation of any written action plans or procedures.
- ❑ As appropriate, make copies of any EOC-developed action plans and ensure that distribution is made to designated persons.
- ❑ Periodically collect and file documentation needed for the official record.
- ❑ Collect, maintain and store messages, records, and logs for all EOC Units.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Be prepared to assist in the development of and provide materials for the After-Action Report.

Technical Specialist Unit Checklist

- ❑ Report to the Planning/Intelligence Section Chief and obtain a situation briefing.
- ❑ Determine appropriate work location within the EOC.
- ❑ If relocating to work with an EOC function, advise the Planning/Intelligence Section Chief of your location.
- ❑ Represent your agency at planning meetings, as appropriate.
- ❑ Coordinate deactivation with the Liaison Coordinator. Ensure your agency's representation is no longer needed prior to leaving.

LOGISTICS SECTION

Logistics Section Chief Checklist

- ❑ Report to the EOC Director.
- ❑ Ensure that all appropriate units within the section have been activated to the appropriate level, are adequately staffed, and functioning.
- ❑ Interact with each unit in the section to obtain information; assist in the coordination between other EOC sections, divisions, and units; and ensure that the proper flow of information is taking place.
- ❑ Participate in action planning as required.

Communications Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Test all telephone/radio communications and information systems.
- ❑ Determine status of any available back-up systems for emergency communications.
- ❑ Participate in EOC planning meetings, as required.
- ❑ As requested, provide plan for back-up emergency communications and to restore communications.
- ❑ Maintain accurate and complete records, including time log.

Supply Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine if there are equipment and supply shortages.
- ❑ Assist in locating equipment and supplies.
- ❑ Determine if alternate supply distribution points should be established and coordinate locations.
- ❑ Coordinate the procurement and distribution of equipment and supplies.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.

Food Service Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine if there are any present or projected critical food service needs.
- ❑ Obtain and process all food service orders.
- ❑ Coordinate the procurement and distribution of food for emergency workers.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.

Transportation Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine needs for transportation vehicles.

- ❑ Obtain and maintain inventory of all water utility vehicles that could be used for transportation.
- ❑ Process all incoming orders for use of transportation vehicles.
- ❑ Arrange, as necessary, for obtaining additional vehicles from other sources.
- ❑ Ensure that transportation vehicles are being maintained at adequate levels for the duration of the emergency.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.

Personnel Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine if adequately trained personnel are available to support sustained EOC operations.
- ❑ Request additional personnel, when necessary.
- ❑ Ensure that current records are maintained for personnel assigned to the EOC.
- ❑ Obtain and process requests for augmentation personnel.
- ❑ Determine if personnel needs require requesting Mutual Aid/Assistance.
- ❑ Ensure that the EOC Director is aware of personnel needs.
- ❑ Anticipate personnel needs for future operational periods.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Participate in the preparation of the After-Action Report.

Maintenance Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine maintenance requirements.
- ❑ Determine priorities and schedule maintenance services.
- ❑ Coordinate and monitor maintenance services.
- ❑ Request additional personnel and equipment support for maintenance as necessary.
- ❑ Participate in EOC planning meetings, as required.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Participate in the preparation of the After-Action Report.

Heavy Equipment and Tools Unit Chief Checklist

- ❑ Obtain briefing from the Logistics Section Chief.
- ❑ Determine if there is adequate heavy equipment and tools to meet anticipated field needs.
- ❑ Locate heavy equipment and tools to meet future needs.
- ❑ Coordinate the procurement and distribution of heavy equipment and tools.
- ❑ Participate in EOC planning meetings, as required.

Employee Care and Support Unit Chief Checklist

- ❑ Notify family members in the event of injury or death of an employee.

- ❑ Assist with employee notifications and recall, as requested.
- ❑ Arrange for employee/family contacts and provide staff for Employee Emergency Hotline.
- ❑ Arrange for shelter and feeding of water utility employees and Mutual Aid/Assistance emergency workers, as necessary.
- ❑ Assist Red Cross in locating any displaced employee family members.
- ❑ Provide public affairs with information for employee informational bulletins.
- ❑ Arrange for stress debriefing for employees, as necessary.
- ❑ Conduct workers' compensation follow-up of injured employees.
- ❑ Conduct follow-up with employees who have been directly affected by the disaster.
- ❑ Identify follow-up actions for families of any employees who may have been killed.

FINANCE/ADMINISTRATION BRANCH

Finance/Administration Section Chief Checklist

- ❑ Obtain briefing from EOC Director.
- ❑ Assign specific duties to support staff, and supervise staff.
- ❑ As needed, request additional personnel resources.
- ❑ Participate in all EOC planning meetings.
- ❑ Collect and process damage and casualty information.
- ❑ Compile report on emergency response costs resulting from emergency activation.
- ❑ Monitor documentation of damages.
- ❑ As appropriate, provide support for the development of short- and long-term financial strategies.
- ❑ Assist in the preparation and analysis of emergency contracts for personnel services, supplies, and equipment.
- ❑ Ensure that purchase orders or contracts related to the emergency are identified with an appropriate emergency stamp or other identification.
- ❑ Track extraordinary expenditures and accumulate cost-related information.
- ❑ Advise on the availability of emergency funds and coordinate processing as required.
- ❑ Be prepared to provide cost data related to the emergency.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Participate in the preparation of the After-Action Report.

Procurement and Contracts Unit Chief Checklist

- ❑ Obtain briefing from the Finance/Administration Section Chief.
- ❑ Establish the likely requirements for procuring equipment, supplies, and vendor contracts.
- ❑ Assist in locating local sources for equipment and supplies.
- ❑ Prepare, assist, and authorize contacts, vendor agreements, and leases, as necessary.
- ❑ Directly establish contracts and agreements with supply vendors, as necessary.
- ❑ Ensure proper accounting practices are in place for all agreements.
- ❑ Advise on the availability of emergency funds and coordinate processing, as required.
- ❑ Maintain accurate and complete records, including time log.
- ❑ Participate in the preparation of the After-Action Report.

Cost Account Unit (Cost Unit) Chief Checklist

- ❑ Report to and obtain briefing from the Finance/Administration Section Chief.
- ❑ Assign specific duties to support staff, and supervise staff.
- ❑ Coordinate with EOC Director on cost reporting procedures to be used.
- ❑ Ensure that cost/loss information is being compiled.
- ❑ Collect and process damage and casualty information.
- ❑ Develop emergency related cost/loss summaries.
- ❑ Advise on alternative cost strategies, as appropriate.
- ❑ Compile report on costs resulting from the emergency activation.
- ❑ Monitor documentation of costs related to damages.
- ❑ As appropriate, provide support to the development of short- and long-term financial strategies.
- ❑ Assist in the preparation and analysis of the cost related aspects of emergency contracts for personnel services, supplies, and equipment.
- ❑ Track extraordinary expenditures and accumulate cost-related information.
- ❑ Advise on the availability of emergency funds and coordinate processing as required.
- ❑ Maintain accurate and complete records, including time log.

Time Recording Unit Chief Checklist

- ❑ Report to and obtain briefing from Finance/Administration Section Chief.
- ❑ As needed, request additional personnel resources.
- ❑ Prepare requirements statement regarding collection and maintaining of time records associated with the emergency.
- ❑ Ensure this statement is provided to all personnel working on the emergency.
- ❑ Determine process and schedule for collecting daily time reports from all EOC and field unit staff.
- ❑ Ensure that contractor personnel and equipment times are being recorded, and that these records are being preserved.
- ❑ Monitor the time recording function and ensure that daily personnel time recording is being accomplished.
- ❑ Ensure that all time records are current and complete prior to demobilization.

EXAMPLE MUTUAL AID/ASSISTANCE CHECKLISTS

Borrower Mutual Aid/Assistance Checklist

Identify Need

- ☐ Ensure a real need exists. Mutual Aid/Assistance is only to be used to augment resources already reasonably committed.
- ☐ What can Mutual Aid/Assistance crews help you repair/service?
- ☐ Identify what type of equipment, material, cameras and skilled employees are needed.
- ☐ How long may they be needed? (This requires damage assessment.)
- ☐ Where will they report? Where will they work?
- ☐ Will crews work independently or with a supervisor from your yard?

Arrangement

- ☐ Where will Mutual Aid/Assistance crews eat, sleep and shower? Do you need to make contact with Red Cross for feeding? What facilities/hotels are available for crews?
- ☐ Identify a staging area where they will meet a supervisor from your water utility to be briefed and assigned work. Incoming Mutual Aid/Assistance crews will need the name of your supervisor and the location to meet.

Who Can Help

- ☐ Preview list of signatories and locate water utility not affected by emergency.
- ☐ Call the available water utility directly.
  - Identify yourself.
  - State problem.
  - Quantify need for people and resources and how long they are needed.
  - Advise on weather conditions.
  - How soon is it needed? Is work time-sensitive?
  - Where and to whom do they report?
  - What routes are open for crews to get there?

Briefing

- ☐ Meet with your water utility's union representatives to discuss how Mutual Aid/Assistance crews will be used.
- ☐ Identify a staff person to work directly with Mutual Aid/Assistance crews to handle and address crew questions.
- ☐ Provide local street maps of area with needed information, such as eating and sleeping sites.
- ☐ Provide water system maps and discuss how to use them.
- ☐ Review key standards your water utility uses for pipe repairs, fittings, and distribution methods.
- ☐ Identify critical equipment needs for working on special pipes or system features used by your water utility.

- ☐ Identify how and where crews can get fuel, supplies, and parts.
- ☐ Do crews leave trenches open? What safety measures are needed with trenches?
- ☐ What is to be done with spoils?
- ☐ Provide supervisor (crew commander) with water utility radio that can be easily attached to vehicle, along with call-sign information.
- ☐ Provide supplies for proper documentation of damages and crew repairs.
- ☐ Identify other agencies that visiting crews may need to interact with (i.e., Red Cross for feeding, fire water utility support to pump up system, etc.).
- ☐ Hold daily briefings with crews to review progress and work assignments.
- ☐ Be sure to set shifts of no more than 12 hours, and that shift schedules are observed for your own crews and Mutual Aid/Assistance crews.

Documentation

- ☐ Review documentation procedures with crew supervisor.
- ☐ Each day, have financial staff review documentation material with Mutual Aid/Assistance supervisor.
- ☐ Follow-up.
- ☐ Before sending crews home, meet with them, comment on help, and thank them for their work.
- ☐ Send letter of thanks (and/or items of appreciation).
- ☐ Send copy of After-Action Reports.

Lender Mutual Aid/Assistance Checklist

Clarify Need

- ☐ Review types of damage and what crews may be expected to deal with (size/type of pipe repairs, etc.).
- ☐ Review types of equipment, materials, number of crews needed, and skills required.
- ☐ How long are crews needed? Should we prepare a relief crew?
- ☐ Ask where crews could stay and how they would be fed?
- ☐ Identify a communications plan for crews. How do they communicate with each other, the borrowing water utility, and family?
- ☐ How will lending crews affect current operations?
- ☐ Immediately notify General Manager of request for Mutual Aid/Assistance. Get permission for sending crews.
- ☐ Ask General Manager to notify elected officials.

Preparations

- ☐ Identify volunteer crew to travel. Review crew selection with union representatives. Ask crews to bring sleeping bags or other means for sleeping.
- ☐ Identify an Incident Commander for the crews, and appoint staff to function as Operations, Planning/Intelligence, Logistics, and Finance/Administration Chief(s).

- ☐ Review FEMA documentation procedures with supervisors and initiate separate personnel and equipment record keeping.
- ☐ Inventory and standardize stock of equipment on all vehicles.
- ☐ Inspect all vehicles for travel and equipment for use.
- ☐ Send a mechanic with crews.
- ☐ Set up daily check-in time between Mutual Aid/Assistance supervisor and home water utility.
- ☐ Review progress.
- ☐ Identify hours worked, working conditions, and status of crews.
- ☐ Arrange for credit card or cash (not check) with crew supervisor for initial expenses.
- ☐ Send mobile phone and ham radio equipment as backup for communications.
- ☐ Check with FCC to get permission to use own radios for field communication, and insure borrower has radio for crew supervisor.
- ☐ Be sure emergency food and water are on each vehicle.
- ☐ Check with CHP about travel through scales.

<u>While Crews Are Away</u>

- ☐ Check daily with supervisor.
- ☐ Review costs associated with assistance.
- ☐ How many hours each day are crews working?
- ☐ How long will work last?
- ☐ Any problems with lodging or feeding?
- ☐ Provide daily summary of events to General Manager.

<u>Upon Return</u>

- ☐ Hold debriefing with supervisor within seven days.
- ☐ Hold debriefing with all crews within 14 days. Include General Manager or other appropriate staff.
- ☐ Identify lessons learned.
- ☐ Identify problems and successes.
- ☐ Review hours worked and efforts made.
- ☐ Review ideas to improve own readiness.
- ☐ Prepare a report of events within 60 days to present to the General Manager.

<u>Within 60 Days</u>

- ☐ Submit bill for personnel and other related costs for Mutual Aid/Assistance response.

Incident Commander Mutual Aid/Assistance Checklist

<u>Upon Arrival</u>

- ☐ Check in with supervisor at site.
- ☐ Review maps, damage information, repair needs, and potential crew assignments. Request information on repair standards.

- ☐ Ensure lodging and feeding facilities exist. If not, identify crew member to work on it and ask the BORROWER for assistance.
- ☐ Review documentation procedures with Borrower's supervisor.
- ☐ Obtain supplies to track repairs and costs associated with each repair site.
- ☐ Establish daily briefing time with the Borrower's supervisor. Include crews on briefing.
- ☐ Ensure shifts of no more than 12 hours are followed.

Daily Process

- ☐ Briefing with supervisor and crew on work assignments and progress.
- ☐ Review safety procedures for crew, open trenches, and spoils.
- ☐ Ensure lunch and evening food breaks are provided and that a system for feeding is set each day.
- ☐ Contact home water utility for briefing.
- ☐ Review documentation at end of each day for completeness.

Work Termination

- ☐ Meet with crews to review successes. Allow relaxation time before leaving.
- ☐ Identify total work hours and number of repairs.
- ☐ Identify total costs associated with work.

EXAMPLE OF A BOIL WATER ORDER

BOIL WATER ORDER Date

(NAME OF UTILITY)

Failure to follow this advisory could result in stomach or intestinal illness.

Due to the recent event (e.g., flood, fire, earthquake, or other emergency situation), the California Department of Health Services, in conjunction with the _____ County Health Department, and _____ Water System are advising residents to boil their tap water or use bottled water for drinking and cooking purposes as a safety precaution.

All tap water used for drinking or cooking should be boiled rapidly for at least 2 minutes at a full rolling boil. This is the preferred method to assure that the water is safe to drink.

An alternative method of purification for residents that do not have gas or electricity available, is to use fresh liquid household bleach (Clorox, Purex, etc.). To do so, add 8 drops (or 1/8 teaspoon) of bleach per gallon of clear water or 16 drops (or 1/4 teaspoon) per gallon of cloudy water. Mix thoroughly and allow to stand for 30 minutes before using. A chlorine-like taste and odor will result from this purification procedure and is an indication that adequate disinfection has taken place.

Optional:

Potable water is available at the following locations:

_____

Please bring clean water container (5 gallons maximum capacity).

Emergency water treatment and quality testing are being conducted by _____ to resolve this water quality emergency problem. The _____ will notify residents as soon as the water is safe to drink.

For more information call:

Water Utility contact: _____

(Name, title, and phone of responsible utility representative)

California Department of Health Services: _____

Environmental Health Jurisdiction: _____

EXAMPLE OF A BOIL WATER ORDER PRESS RELEASE

PRESS RELEASE

FOR IMMEDIATE RELEASE
DATE: _____

CONTACT: _____
PHONE: _____

BOIL WATER ADVISORY

The (city or county health department) and the Department of Health Services advises that there is a possibility of contamination in the (_____) water distribution system. Several recent test samples have revealed the presence of _____. However, the lab results indicated that the possible contaminant is NOT fecal origin. The (_____) water department personnel have not been able to identify any reason or incident that would have caused the positive test results. Water samples will be taken daily until the contaminant is identified and the problem is resolved.

To ensure adequate public safety, you are advised to choose one of the following options for tap water used for drinking and cooking purposes:

1. Commercially available bottled water, or
2. Boil all tap water for at least 2 minutes at a full, rolling boil.

Until you are notified by the health department, all water obtained from the system for drinking and cooking should be boiled. If you have any questions, please contact the health department or the Department of Health Services, Office of Drinking Water at ( ) _____.

EMERGENCY PREPAREDNESS PROGRAM SURVEY

NAME OF COMPANY/AGENCY _____

DATE _____

ASSESSOR(S) _____

_____

_____

_____

_____

_____

_____

_____

		1 Yes	2 No	3 Needs Improvement

SECTION 1: PREPAREDNESS

STANDARD: The Company / Agency has a planning standard for providing emergency planning support and liaison in the areas of pre-emergency, emergency, and post emergency (recovery) periods.

PLANNING

1.	Does the Company/Agency have a written planning standard for dealing with disaster events?	o	o	o
2.	Does the Emergency Planning Standard provide for:			
	Policy and Authority?	o	o	o
	Establishing an Emergency Planning group?	o	o	o
	Identifiable Emergency Management Organization?	o	o	o
	Clear provisions for activating staffing and operating the Emergency Operations Center(s)?	o	o	o
	Clear disaster roles and responsibilities for the Emergency Management Organization teams?	o	o	o
	A Communications Plan that clearly describes primary and alternate (i.e. backup) choices in the case of dial tone failure?	o	o	o
	Periodic and regular drills and exercises to test the Planning Standard?	o	o	o
	User-friendly checklists from which Pre-Plan contents can be checked for adequacy/completion?	o	o	o
	Activation check lists for each of the EMO levels (site-function specific)?	o	o	o
	A certification process for both Plans and Emergency Management Organization personnel?	o	o	o
	A process to ensure the Company Planning Standard is maintained as current?	o	o	o
3.	Has the Company/Agency Disaster Planning Standard been discussed and coordinated with those of other local companies, private organizations, and public agencies?	o	o	o

1 2 3

		Yes	No	Needs Improvement
4.	Does the Company provide leadership support and assistance to local governmental agencies in preparing for community survival?	o	o	o
STAFFING				
5.	Is there a small centralized and dedicated staff in place to do Emergency Planning?	o	o	o
6.	Is there linkage and team work between the dedicated staff and the Emergency Management Organization?	o	o	o
7.	Is the dedicated staff populated with subject matter expertise in the EMO functions and responsibilities?	o	o	o
8.	Does the staff integrate Planning with the EMO, other utilities, and governmental agencies?	o	o	o
COMMITMENT				
9.	Have your senior executives communicated an Emergency Preparedness Policy?	o	o	o
10.	Is there a Continuity of Management Plan your officers participated in that you support?	o	o	o
11.	Do officers of your company attend, observe, or participate in drills and exercises that test the Company Emergency Plan?	o	o	o
TRAINING				
12.	Does your Company/Agency conduct regular periodic drills/exercises?	o	o	o
		1 Yes	2 No	3 Needs

				Improvement
13.	Are critiques of drills/exercises and actual emergencies conducted to upgrade the Plan?	o	o	o
14.	The following training courses are available to all employees:			
	CPR	o	o	o
	Basic First Aid	o	o	o
	Triage First Aid	o	o	o
	Fire Extinguisher	o	o	o
	Building Warden	o	o	o
	Emergency Program	o	o	o
15.	Is there visible commitment at all levels in your Company/Agency to complete life-safety training, even during budgetary constraint periods?	o	o	o
16.	Have necessary steps been taken to provide all employees a guide in disaster preparedness?	o	o	o
17.	Have all personnel been instructed in methods of personal and family survival?	o	o	o

SECTION 2: MITIGATION

STANDARD: Measures to prevent or mitigate the effects of a potential disaster are clearly identified, prioritized, and consistent with the Company's/Agency's business activities and the risks to those activities.

VULNERABILITY ANALYSIS/CORRECTION

18.	Has the Company's/Agency's disaster vulnerability been determined? (Assess the potential hazards at the facility(ies) and in the surrounding area that may require emergency action.)	o	o	o
		1	2	3
		Yes	No	Needs Improvement

19.	Have key (i.e. priority) buildings been identified for appropriate mitigation work, such as seismic surveys/repairs, augmented bolting and bracing of equipment, retrofitting structural support to meet/exceed building codes?	o	o	o
20.	Are regular site inspections conducted and appropriate corrective action taken?	o	o	o
21.	Is there a plan in place to secure furniture, equipment, etc.?	o	o	o

ESSENTIAL RECORDS

22.	Have Essential Records required for Business and Operational resumption been identified and protected?	o	o	o
23.	Are duplicates of vital records stored safely off site?	o	o	o

SUPPLIES

24.	Does the Emergency Plan provide for survival supplies such as food, water, and medical supplies that would last for a 72-hour period?	o	o	o
25.	Are basic safety supplies such as first aid kits, flashlights, ropes, and hand tools stored in visible and easily accessible areas for all employees?	o	o	o
26.	Is an inventory of emergency equipment / equipment suppliers maintained?	o	o	o

STRUCTURAL/EQUIPMENT PROTECTION

27.	Does the Company/Agency provide clear design standards for new buildings or building additions that meet the requirements of the Uniform Building Codes?	o	o	o
		1 Yes	2 No	3 Needs Improvement

28.	Is the process in place to schedule and implement existing building retrofits as identified in question 19?	o	o	o
29.	Does the Company/Agency schedule and implement equipment bolting and bracing enhancement consistent with the probable disaster type and intensity for those area(s) susceptible to a disaster impact?	o	o	o
30.	Does the Company/Agency have a written Fire Suppression Prevention Strategy with clearly defined protection steps?	o	o	o
31.	Does the Company/Agency conduct periodic comprehensive fire safety assessments at all locations?	o	o	o
32.	Is there a Site Manager Program which monitors fire and safety practices?	o	o	o

SECTION 3: RESPONSE

STANDARD: Should a disaster interrupt business activity or isolate key management personnel, the Company/Agency has the necessary preparedness and response capability, guided by a well-thought-out plan, which enables trained employees to execute their emergency roles.

33.	Has the Company/Agency established an Emergency Management Organization (EMO) to provide policy direction, coordination, and overall management of emergency operations?	o	o	o
34.	Has the Company/Agency established a procedure for the operation of Emergency Operation Centers (EOC) and communication systems (Primary and Alternate) critical to restoration activities?	o	o	o
35.	Are there well defined roles and responsibilities for each	1 Yes	2 No	3 Needs Improvement

level of the EMO, from the Policy Group through the

	EOC level, and to the Operation level Incident Command Coordinators?	o	o	o
36.	Do the Emergency Operating Center teams have written Pre-Plans addressing communications and response options?	o	o	o

COMMUNICATIONS

37.	Have alternate communication systems been developed and specific back-up communication options been identified in Pre-Plans?	o	o	o
38.	If back-up facilities are not in daily use, have routines been established to regularly test those critical facilities?	o	o	o
39.	Have alternate methods to restore back-up communications been planned?	o	o	o
40.	Do restoration personnel understand that back-up communication is the highest restoration priority?	o	o	o

MUTUAL AID/ASSISTANCE

41.	Are there Mutual Aid or Assistance Agreements between Companies/Agencies in place to minimize the effects of disasters upon the users of the Company's/Agency's services?	o	o	o

CONTINUITY OF MANAGEMENT AND OPERATIONS

42.	Does the Company/Agency have documented Continuity of Management Plan?	o	o	o
43.	Does the Company/Agency have documented Continuity of Operation Plan?	o	o	o

		1 Yes	2 No	3 Needs Improvement
44.	Is there an operational Emergency Relocation			

	Center (Survival Site) established?	o	o	o

SECTION 4: RECOVERY

STANDARD: Recovery from disasters depends on anticipated activities required for the resumption of normal levels of operations.

DAMAGE IMPACT EVALUATION

45.	Does the Company/Agency have a procedure for initiating a comprehensive survey of facilities (assets) in coordination with civil authorities and insurance underwriters?	o	o	o
46.	Is there a process for itemizing structural and non-structural equipment, utility system, and communication system damages, including photographs of such damages?	o	o	o
47.	Is there a procedure for identifying the potential need for contracted services, labor, and material for damage repair and restoration of operations?	o	o	o
48.	Is there accountability and a process for summarizing the damage survey with estimated repair costs and recovery schedules?	o	o	o

CLEAN-UP AND SALVAGE OPERATIONS

49.	Are there procedures established for identifying, removing, and disposing of hazardous material releases or spills or any other consequential effects of the disaster that threaten facilities?	o	o	o

		1 Yes	2 No	3 Needs Improvement

BUSINESS RESTORATION

50.	Are procedures established for relocating to temporary/alternate facilities should primary facilities be destroyed or beyond immediate repair?	o	o	o
51.	Is there a process for ensuring that key personnel respond to work sites or alternate headquarters?	o	o	o
52.	Are there provisions for some limited transport access to the Company's/Agency's facilities for the movement of essential supplies and key personnel?	o	o	o

CUSTOMER/CLIENT INFORMATION

53.	Is there a process for advising customers and clients regarding restoration of services and availability of goods?	o	o	o
54.	Is there a procedure for providing general information to the public about the best way to use the goods and services provided by the Company/Agency during the recovery?	o	o	o

INTERGOVERNMENTAL RELATIONS

55.	Are there networking procedures established between private industry and appropriate levels of government to expedite recovery activity and provide mutual support of recovery operations?	o	o	o

SUMMARY RATINGS

	Total Questions	#of Yes	#of No	#of Needs Improvement
• SECTION 1: PREPAREDNESS	27			
• SECTION 2: MITIGATION	15			
• SECTION 3: RESPONSE	12			
• SECTION 4: RECOVERY	11			
TOTAL:	65			

RANGES

# Yes Answers	Current Status
0 - 20	o Start Up Required
21 - 35	o Initial Stages
36 - 50	o Average
51 - 60	o Above Average
61 - 65	o High State of Readiness or Benchmarking Level of Preparedness

OVERALL QUALITY ASSESSMENT

	Very Satisfied	Somewhat Satisfied	Neither Satisfied nor Dissatisfied	Somewhat Dissatisfied	Very Dissatisfied
1. Based on the result of this survey, how satisfied are you with the quality of your Company's/Agency's Emergency Preparedness and Response Planning Standard?	o	o	o	o	o
2. How would you rate the overall capability of your Company/ Agency EOC level to respond to a disaster?	o	o	o	o	o